

# Statement of Basis of the Federal Operating Permit

Motiva Enterprises LLC

Site Name: Port Arthur Refinery  
Area Name: Port Arthur Refinery PAR-CEP  
Physical Location: 2555 Savannah Avenue  
Nearest City: Port Arthur  
County: Jefferson

Permit Number: 03387  
Project Type: Renewal

Standard Industrial Classification (SIC) Code: 2911  
SIC Name: Petroleum Refining

This Statement of Basis sets forth the legal and factual basis for the draft permit conditions in accordance with 30 TAC §122.201(a)(4). Per 30 TAC §§ 122.241 and 243, the permit holder has submitted an application under § 122.134 for permit renewal. This document includes the following information:

- A description of the facility/area process description;
- A basis for applying permit shields;
- A list of the federal regulatory applicability determinations;
- A table listing the determination of applicable requirements;
- A list of the New Source Review Requirements;
- The rationale for periodic monitoring methods selected;
- The rationale for compliance assurance methods selected;
- A compliance status; and
- A list of available unit attribute forms.

Prepared on: July 20, 2016

## **Operating Permit Basis of Determination**

### **Permit Area Process Description**

The processing units in the CEP application area include a Vacuum Pipe Still with an LSAT Gas Plant and Mercaptan Removal Unit (MRU); Delayed Coking Unit; Hydrocracking Unit; Naphtha Treating Complex with Naphtha Hydrotreating Unit (NHTU), Panex C5-C6 Isomerization Unit, and Catalytic Reforming Unit; Distillate Hydrotreating Unit (also referred to as the Cat Feed Hydrotreating Unit); Sulfur Block Units; storage facilities and loading/unloading operations; and refinery utilities, including a power plant, flares, cooling towers, wastewater treatment system, and maintenance activities. The emission sources associated with the application area are discussed in the following sections. References to the “existing” units refer to units addressed in FOP O1386.

### **Vacuum Pipe Still**

The operation of the new Vacuum Pipe Still No. 5 (VPS5) is similar to the existing Vacuum Pipe Still No. 2 (VPS2) and Vacuum Pipe Still No. 4 (VPS4) included in FOP O1386 and includes a Saturated Gas Plant (Sat Gas Plant) which produces fuel gas, liquid propane, normal butane, and isobutane, and a MRU. VPS5 is designed to process heavy crudes. Products from this unit, in addition to those from the Saturated Gas Plant, are naphtha, which is further processed in the NHTU; Fluid Catalytic Cracking Unit (FCCU) charge and kerosene, which are processed in the Hydrotreating Units and the Hydrocracking Unit 2 (HCU2); atmospheric gas oil (AGO) and light vacuum gas oil (LVGO), which is mainly processed in the Cat Feed Hydrotreater (CFH) and the existing Fluid Catalytic Cracking Unit 3 (FCCU3); vacuum gas oil (VGO) and heavy vacuum gas oil (HVGO), which are processed in either CFH, HCU2, or FCCU3; and vacuum residuum, which is mainly charged to the new Delayed Coking Unit. The Saturated Gas Plant includes a MRU, which removes sulfur compounds from a C3-C4 stream. The sulfur leaves the MRU as a disulfide oil stream, which is routed to the Naphtha Hydrotreating Unit 2 (NHTU2), and in the spent caustic. The treated C3-C4 is then split in the C3-C4 splitter. Overhead product from the splitter is a liquid propane stream that is routed to storage and shipped via pipeline. The splitter bottoms stream is split in a de-isobutanizer tower into an isobutene overhead stream, which is routed to the existing Alkylation (ALKY) Unit, and a normal butane bottoms stream, which is routed to storage and used for gasoline blending prior to being sold via pipeline.

### **Delayed Coking Unit**

The primary purpose of the new Delayed Coking Unit 2 (DCU2) is to process the vacuum residuum, which is a high boiling vacuum flash residue that is commonly referred to as “pitch,” from VPS5 to produce refinery fuel gas, mixed C3’s or a propane/propylene stream, mixed C4’s or a butane/butylenes stream, naphtha, light gas oil, heavy gas oil, and petroleum coke. The DCU consists of four sections: a main fractionator, charge heaters, a gas plant, and the coke handling operations, which include six coke drums. The operation of DCU2 is very similar to the existing Delayed Coking Unit 1 (DCU1). The main product from DCU2 is petroleum coke, which must be cut from the coke drums using a high pressure hydraulic cutting bit. The coke falls from the bottom of the drum into a pit, where it is stored wet and then later removed for shipment via railcar, or occasionally by truck. Coke handling operations at the DCU2 are similar to DCU1. Other products from DCU2 are further processed in downstream units. The mixed C3 stream is either processed in the Sat Gas Plant or combined with refinery grade propylene; the mixed C4 stream is processed in the existing ALKY unit; naphtha is processed in the Naphtha Hydrotreating Unit; Light Coker Gas Oil (LKGO) is processed in the new Hydrocracking Unit or the Hydrotreating Units; and Heavy Coker Gas Oil (HKGO) is processed in the new Hydrocracking Unit or Cat Feed Hydrotreater.

### **Hydrocracking Unit**

The new Hydrocracking Unit 2 (HCU2) converts heavy, high boiling gas oils into lighter, more desirable products, such as refinery fuel gas, naphtha, and diesel. Feedstocks to HCU2 consist of heavy coker gas oil (HKGO) from the DCU2; straight run gas oil (SRGO), which is a mix of different gas oils from VPS5; intermediate (cycle) gas oil (ICGO) from the existing FCCU3; lube extract, which is a product from the existing Methyl Pyrrolidone Units (MPU3 and MPU4); and hydrogen. The new HCU2 is a moderate temperature, high pressure, fixed-bed catalytic cracking process. The unit consists of two main sections, the reactor section and the product recovery section, and operates in essentially the same manner as the existing unit before its

conversion to a lube unit in 2006. Feedstocks are mixed with hydrogen and heated before entering the first reactor, where nitrogen and sulfur compounds are converted to ammonia (NH<sub>3</sub>) and hydrogen sulfide (H<sub>2</sub>S), and then the second reactor, where catalytic cracking and hydrogenation reactions take place under controlled temperatures and pressures to produce the desired products. HCU2 has an integrated diesel hydrotreating section that processes cracked and straight-run diesel feedstocks. Products from the hydrocracking and hydrotreating sections are commingled before routing off-site.

Products from HCU2 include fuel gas, which is fired in PAR furnaces and process heaters; a mixed C3-C4 stream, which is further processed in the new Sat Gas Plant; light naphtha, which is routed to gasoline blending; heavy naphtha, which is routed to the new Catalytic Reforming Unit; diesel, which is sent to blending; and bottoms, which are typically sent to FCCU3 for processing.

Catalyst activity decreases with age. Using typical feedstocks, it takes two to four years for the accumulation of coke and other deposits to decrease catalyst activity to a level that requires regeneration or replacement with fresh catalyst. Catalyst regeneration takes place off-site.

### **Naphtha Hydrotreating Complex**

The Naphtha Hydrotreating Complex includes a Naphtha Hydrotreating Unit, a Penex Isomerization Unit, a Catalytic Reforming Unit, and supporting processing units.

Feed to the Naphtha Hydrotreating Unit (NHTU) includes naphtha and debutanized straight-run gasoline (DBSR) from the existing Vacuum Pipe Still No. 4 (VPS4), and naphtha from DCU2. Sulfur and nitrogen are removed from the feed in the NHTU. The feedstock is then processed in the naphtha splitter where a mixed C5-C6 stream is produced for feed to the depentanizer tower. Naphtha splitter bottoms with heavy hydrocracker naphtha are charged to the existing Catalytic Reforming Unit 2 (CRU2). Hydrogen is recovered for reuse in the Hydrotreating Units by a Pressure Swing Adsorption (PSA) Unit.

The Continuous Catalytic Reforming Unit 5 (CRU5) is similar to the existing Continuous Catalytic Reforming Unit 4 (CRU4). The purpose of CRU5 is to rearrange the molecular structure of the incoming feed to produce a higher percentage of aromatics and isoparaffins in the product stream, which is referred to as reformate. The reformate is used as gasoline blendstock. The other products include fuel gas, which is fired in the PAR furnaces and process heaters, and a mixed C3-C4 stream, which is processed in the new Sat Gas Plant.

The naphtha splitter overhead is charged to the new depentanizer tower, which takes a mixed C5 overhead stream overhead for gasoline blending. Depentanizer bottoms stream are routed to a UOP Penex Isomerization Unit. The Penex Unit charges a C5-C6 mixture and hydrogen with a chlorided platinum alumina catalyst under moderate temperature and pressure. The products from the Penex Unit include a C6 stream, which are both sent to gasoline blending, and a small C7+ stream, which is routed to the naphtha splitter.

### **Hydrotreating Unit**

The new Distillate Hydrotreating Unit 6 (HTU6), also referred to as a Cat Feed Hydrotreating Unit (CFH), is very similar to the existing Hydrotreating Unit 5 (HTU5). Hydrotreating or catalytic hydrodesulfurization accomplishes two main objectives: it removes contaminants, such as sulfur and nitrogen, from the feedstock and it improves the quality of the product. Feed to the proposed unit typically consists of heavy vacuum gas oil from VPS5. AGO, LVGO, HKGO, and lube extract may be processed in the Hydrotreating Units. Product from HTU6 is used as feed to FCCU3.

### **Sulfur Block Unit**

Each Sulfur Block Unit (SBU) has essentially identical processes. There are three sulfur recovery trains on each SBU, each capable of processing elemental sulfur with or without supplemental oxygen. Each sulfur recovery train consists of a Claus sulfur recovery unit, followed by a tail gas treatment unit, and a tail gas incinerator. Each SBU also includes amine recovery units and sour water strippers.

### **Amine Recovery Units**

The Amine Recovery Units (ARU1, 2, 3, 4, 5, 6) removes H<sub>2</sub>S from the sour gas generated by upstream processing units. Lean methyl diethanolamine (MDEA) is used as the solvent to absorb H<sub>2</sub>S, producing rich

amine. Steam stripping is used to separate the  $H_2S$  from the rich amine and the resulting offgas, known as acid gas, is sent to the sulfur recovery units for further processing. Regenerated lean amine is routed to various refinery units to treat sour gas from those units.

### **Sour Water System**

Sour water from the refinery process units is sent to the surge tank(s) prior to being processed in sour water strippers (SWSs). The sour water is heated in the feed/bottom exchangers and then enters the SWS, where steam is injected. The stripping system flashes off  $H_2S$  and  $NH_3$ , which leaves the tower and goes through a knockout drum prior to being sent to the Sulfur Recovery Units. Stripped sour water is recycled for use as desalter or hydroprocessing wash water. Surplus SWS bottoms is routed to the Activated Sludge Treatment Unit (ASTU).

### **Sulfur Recovery Units**

These units process the acid gas streams from the ARUs and the SWSs. Each sulfur recovery unit (SRU2, 3, 4, 5, 6, 7) train uses Claus technology to recover most of the sulfur from the incoming acid gas stream. The  $H_2S/SO_2$  gas that is not converted to elemental sulfur is sent to a tail gas treating unit.

### **Tail Gas Treating Units**

The Tail Gas Treating Units (TGTU1, 2, 5, 6, 7) converts  $H_2S$  and  $SO_2$  from the SRU tail gas to an  $H_2S$  stream for recycle to the Claus technology SRU trains. The SRU tail gas is processed in a hydrotreating reactor, where  $SO_2$  is reduced to  $H_2S$ . Motiva uses the Shell Claus Off-gas Treating (SCOT) technology in the TGTUs. Any unrecovered sulfur compounds in the tail gas from the TGTU are incinerated and emitted to the atmosphere.

### **Tank Farm**

CEP includes tanks for the storage of various materials including intermediate sour water, MDEA, process wastewater, and final products. Storage tanks are either fixed roof tanks, which vents directly to atmosphere or to the refinery vacuum system, or external floating roof tanks equipped with mechanical shoe primary seals and rim-mounted secondary seals.

### **Loading/Unloading Operations**

Petroleum products produced in the application area, with the exception of coke recovered sulfur is sent off-site via pipeline. The coke produced by the DCU2 is shipped mainly by railcar and occasionally by truck. Recovered sulfur is shipped by railcar or truck.

### **Refinery Utilities**

Utilities consist of a power station, flares, and cooling towers. The wastewater collection and treatment system in FOP O1386 also serves the CEP.

### **Power Station**

Power Station No. 4 (PS4) is a cogeneration power plant and a gas-fired steam boiler. The cogeneration power plant is sized to produce approximately 125 MW of electrical output, which is the expected load needed for expansion. The power from the cogeneration plant is distributed to the processing units via an upgraded refinery power grid. The cogeneration power plant consists of four identical combined cycle combustion turbines, nominally rated at 40 MW, each equipped with a heat recovery steam generator (HRSG) that is capable of supplemental duct burner firing. All four turbines are fired with pipeline specification natural gas and equipped with dry low NOx combustors. The HRSG is fired with refinery fuel gas and equipped with low NOx combustors. The HRSG is fired with refinery fuel gas and equipped with low NOx combustors. The combined cycle turbines consist of an air compressor, a combustion chamber, a power turbine, and an electrical generator. Each HRSG uses the hot combustion gases exiting the combined cycle gas turbine to produce steam. Non-contact heating of the boiler feed water produces steam at various pressure levels. High-pressure steam is sent to steam consumers in the refinery complex.

The HRSGs are equipped with supplementary firing (duct burners) to increase steam production, as needed, to meet steam demand. The combined cycle combustion turbines are equipped with Selective Catalytic Reduction (SCR) systems installed downstream of the HRSG. These systems further reduce NOx emissions from the turbines and HRSG.

A gas-fired boiler is also installed to supply supplemental steam, as needed. The boiler is fired with either pipeline specification natural gas or a mixture of natural gas and refinery fuel gas and is equipped with low NOx burners and an SCR system. The cogeneration power plant includes a mechanical draft cooling tower and a circulating water system to supply auxiliary cooling requirements. Clarified water is used for cooling tower make-up. A portion of the cooling water circulation (blowdown) is purged from the system continuously to control containment build-up. The blowdown is sent to the wastewater collection and treatment system.

### Flares

Four flares are used to control emissions during upsets and start-up, shutdown, and maintenance activities. Most of the flares serve more than one process unit. Each flare is designed for smokeless operation. Flare gas recovery (FGR) systems are installed upstream of the new flares. The FGR systems recover non-condensibles from various vent gas streams for use as refinery fuel gas.

### Cooling Towers

Four cooling towers provide cooling water to the refinery process units and associated utilities. While the cooling towers serve several process units, they are installed in VPS5, DCU2, CRU5, and PS4.

### Wastewater Treatment System

The wastewater treatment system, which is authorized pursuant to appropriate Permits by Rule (PBRs) and standard exemptions, has sufficient capacity to handle the wastewater load for both the base plant and the CEP. The wastewater treatment system is addressed in FOP O1386.

### Maintenance Activities

Maintenance, startup, and shutdown (MSS) activities for the base plant and the CEP include flare emissions, tank cleaning and/or repair, vapor recovery system maintenance, pressure vessel degassing for cleaning and/or repair, startup emissions for combustion units, use of miscellaneous chemicals, vacuum trucks, temporary storage in “frac” tanks, and painting of on-site structures and vessels for corrosion prevention.

The painting of on-site structures and vessels is authorized by PBR. The other MSS activities for the base plant and the CEP are addressed in NSR Permit Nos. 6056 and 8404.

### FOPs at Site

The “application area” consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: O1386

### Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	VOC, SO <sub>x</sub> , PM, NO <sub>x</sub> , HAPs, CO
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### Reading State of Texas’s Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as “applicable requirements”) that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
  - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
  - Additional Monitoring Requirements
  - New Source Review Authorization Requirements
  - Compliance Requirements
  - Protection of Stratosphere Ozone
  - Permit Location
  - Permit Shield (30 TAC § 122.148)
- Attachments
  - Applicable Requirements Summary
    - Unit Summary
    - Applicable Requirements Summary
  - Additional Monitoring Requirements
  - Permit Shield
  - New Source Review Authorization References
  - Compliance Plan
  - Alternative Requirements
- Appendix A
  - Acronym list
- Appendix B
  - Copies of major NSR authorizations

## General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

## Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

## Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with

applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the “index number,” detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

**Additional Monitoring Requirement.** The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

**Permit Shield.** A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

**New Source Review Authorization References.** All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

**Compliance Plan.** A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

**Alternative Requirements.** This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

## Appendix A

**Acronym list.** This attachment lists the common acronyms used when discussing the FOPs.

## Appendix B

Copies of major NSR authorizations applicable to the units covered by this permit have been included in this Appendix, to ensure that all interested persons can access those authorizations.

### **Stationary vents subject to 30 TAC Chapter 111, Subchapter A, § 111.111(a)(1)(B) addressed in the Special Terms and Conditions**

The site contains stationary vents with a flowrate less than 100,000 actual cubic feet per minute (acfm) and constructed after January 31, 1972 which are limited, over a six-minute average, to 20% opacity as required by 30 TAC § 111.111(a)(1)(B). As a site may have a large number of stationary vents that fall into this category, they are not required to be listed individually in the permit's Applicable Requirement Summary. This is consistent with EPA's White Paper for Streamlined Development of Part 70 Permit Applications, July 10, 1995, that states that requirements that apply identically to emission units at a site can be treated on a generic basis such as source-wide opacity limits.

Periodic monitoring is specified in Special Term and Condition 3.A. for stationary vents subject to 30 TAC § 111.111(a)(1)(B) to verify compliance with the 20% opacity limit. These vents are not expected to produce visible emissions during normal operation. The TCEQ evaluated the probability of these sources violating the opacity standards and determined that there is a very low potential that an opacity standard would be exceeded. It was determined that continuous monitoring for these sources is not warranted as there would be very limited environmental benefit in continuously monitoring sources that have a low potential to produce visible emissions. Therefore, the TCEQ set the visible observation monitoring frequency for these sources to once per calendar quarter.

The TCEQ has exempted vents that are not capable of producing visible emissions from periodic monitoring requirements. These vents include sources of colorless VOCs, non-fuming liquids, and other materials that cannot produce emissions that obstruct the transmission of light. Passive ventilation vents, such as plumbing vents, are also included in this category. Since this category of vents are not capable of producing opacity due to the physical or chemical characteristics of the emission source, periodic monitoring is not required as it would not yield any additional data to assure compliance with the 20% opacity standard of 30 TAC § 111.111(a)(1)(B).

In the event that visible emissions are detected, either through the quarterly observation or other credible evidence, such as observations from company personnel, the permit holder shall either report a deviation or perform a Test Method 9 observation to determine the opacity consistent with the 6-minute averaging time specified in 30 TAC § 111.111(a)(1)(B). An additional provision is included to monitor combustion sources more frequently than quarterly if alternate fuels are burned for periods greater than 24 consecutive hours. This will address possible emissions that may arise when switching fuel types.

### **Stationary Vents subject to 30 TAC Chapter 111 not addressed in the Special Terms and Conditions**

All other stationary vents subject to 30 TAC Chapter 111 not covered in the Special Terms and Conditions are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents are listed in the Determination of Applicable Requirements table.

### **Federal Regulatory Applicability Determinations**

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

<b>Regulatory Program</b>	<b>Applicability (Yes/No)</b>
Prevention of Significant Deterioration (PSD)	Yes
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes



40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	Yes
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	Yes
CAIR (Clean Air Interstate Rule)	No

## Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

## Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

1. Office activities such as photocopying, blueprint copying, and photographic processes.
2. Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
3. Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
4. Outdoor barbecue pits, campfires, and fireplaces.
5. Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
6. Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
7. Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
8. Storage and handling of sealed portable containers, cylinders, or sealed drums.
9. Vehicle exhaust from maintenance or repair shops.
10. Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
11. Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
12. Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
13. Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feedwater) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.

14. Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
15. Well cellars.
16. Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
17. Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.
18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

### **Determination of Applicable Requirements**

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at [www.tceq.texas.gov/permitting/air/nav/air\\_all\\_ua\\_forms.html](http://www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html).

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at [www.tceq.texas.gov/permitting/air/nav/air\\_supportsys.html](http://www.tceq.texas.gov/permitting/air/nav/air_supportsys.html). The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring,

recordkeeping, or reporting, the word “None” will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled “Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected.”

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled “Basis for Applying Permit Shields” specifies which units, if any, have a permit shield.

#### Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

### Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*
004TK001	30 TAC Chapter 115, Storage of VOCs	R5111	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
BOILER 46	40 CFR Part 60, Subpart Db	60Db-BOILER 46	<p>60.42b(k)(2) Low Sulfur Exemption = The § 60.42b(k)(2) exemption applies.</p> <p>Construction/Modification Date = Constructed or reconstructed after February 28, 2005.</p> <p>D-Series Fuel Type #1 = Natural gas.</p> <p>D-Series Fuel Type #2 = Gaseous fossil fuel other than natural gas and coal-derived synthetic fuel meeting the definition of natural gas.</p> <p>Heat Input Capacity = Heat input capacity is greater than 250 MMBtu/hr (73 MW).</p> <p>PM Monitoring Type = Continuous emission monitoring system, and the facility is not subject to a federally enforceable PM limit of 0.030 lb/MMBtu or less.</p> <p>Facility Type = The affected facility includes a fuel gas combustion device.</p> <p>Opacity Monitoring Type = CONTINUOUS MONITORING SYSTEM FOR Opacity</p> <p>Subpart Da = The affected facility does not meet applicability requirements of 40 CFR Part 60, Subpart Da.</p> <p>Changes to Existing Affected Facility = No change has been made to the existing steam generating unit, which was not previously subject to 40 CFR Part 60, Subpart Db, for the sole purpose of combusting gases containing totally reduced sulfur as defined under 40 CFR § 60.281.</p> <p>Monitoring Device = An instrument is in place for continuous monitoring and recording the concentration (dry basis) of hydrogen sulfide in fuel gasses before being burned in any fuel gas combustion device.</p> <p>NOx Monitoring Type = Continuous emission monitoring system.</p> <p>Common Fuel Source = The fuel gas combustion device has a common fuel source with other fuel gas combustion devices.</p> <p>Electrical or Mechanical Output = 10% or less of the annual output is electrical or mechanical.</p> <p>SO2 Monitoring Type = Continuous emission monitoring system.</p> <p>Subpart Ea, Eb or AAAA = The affected facility does not meet applicability requirements of and is subject to 40 CFR Part 60, Subpart Ea, Eb or AAAA.</p> <p>Subpart J = The affected facility meets applicability requirements of 40 CFR Part 60, Subpart J.</p> <p>Subpart KKKK = The affected facility is not a heat recovery steam generator associated with combined cycle gas turbines and that meets applicability requirements of and is subject to 40 CFR Part 60, Subpart KKKK.</p> <p>Technology Type = Other conventional technology.</p> <p>ACF Option - SO2 = Other ACF or no ACF.</p> <p>Subpart Cb or BBBB = The affected facility is not covered by an EPA approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart Cb or BBBB emission guidelines.</p> <p>Unit Type = OTHER UNIT TYPE</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>ACF Option - PM = Other ACF or no ACF.</p> <p>Heat Release Rate = Natural gas with a heat release rate less than or equal to 70 MBtu/hr/ft<sup>3</sup>.</p> <p>60.49Da(n) Alternative = The facility is not using the § 60.49Da(n) alternative.</p> <p>ACF Option - NOx = Other ACF or no ACF.</p> <p>Heat Input Gas/Oil = The facility combusts natural gas or distillate oil in excess of 30% of the heat input from the combustion of all fuels.</p> <p>60.49Da(m) Alternative = The facility is not using the § 60.49Da(m) alternative.</p> <p>Heat Input Wood = The facility combusts no wood or less than 30% wood by heat input.</p>
BOILER 46	40 CFR Part 63, Subpart DDDDD	63DDDDD-BLR	Construction/Reconstruction Date = Construction or reconstruction began after June 4, 2010.
BOILER 46	30 TAC Chapter 111, Visible Emissions	R1111-BOILER 46	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = A continuous emissions monitoring system (CEMS) capable of measuring the opacity of emissions is installed in the vent in accordance with 30 TAC § 111.111(a)(1)(C).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.</p>
BOILER 46	30 TAC Chapter 115, Vent Gas Controls	R5112-BOILER 46	<p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is from a combustion unit exhaust and the combustion unit is not used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p>
BOILER 46	40 CFR Part 60, Subpart J	60J-BOILER 46	<p>Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b).</p> <p>Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007.</p> <p>Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO<sub>2</sub> emissions into the atmosphere.</p>
CEPFUG	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5322-CEPFUG	<p>Compressor Seals = The fugitive unit contains compressor seals.</p> <p>Flanges = The fugitive unit contains flanges.</p> <p>Open-ended Valves = The fugitive unit contains open-ended valves.</p> <p>Pressure Relief Valves = The fugitive unit contains pressure relief valves.</p> <p>Process Drains = The fugitive unit has process drains.</p> <p>Pump Seals = The fugitive unit contains pump seals.</p> <p>Rupture Disks = The fugitive unit has pressure relief valves equipped with rupture disks.</p> <p>Title 30 TAC § 115.352 Applicable = Site is a petroleum refinery, synthetic organic chemical, polymer resin or methyl tert-butyl ether manufacturing process or a natural gas/gasoline processing operation as defined in 30 TAC 115.10.</p> <p>Valves (other than pressure relief and open-ended) = The fugitive unit contains valves other than pressure relief valves or open-ended valves or lines.</p> <p>Alternate Control Requirement = The TCEQ Executive Director has not approved an alternate method for demonstrating and</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>documenting continuous compliance with an alternate control requirement or exemption criteria for process drains or no alternate has been requested.</p> <p>Instrumentation Systems = The fugitive unit has instrumentation systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169.</p> <p>Less Than 250 Components at Site = Fugitive unit not located at site with less than 250 fugitive components.</p> <p>Sampling Connection Systems = The fugitive unit has sampling connection systems, as defined in 40 CFR § 63.161, that meet 40 CFR § 63.169.</p> <p>Weight Percent VOC = Components in the fugitive unit contact process fluids that contain less than 10% VOC by weight and process fluids that contains VOC at 10%, or greater, by weight.</p> <p>Complying with 30 TAC § 115.352(1) = Process drains are complying with the requirements in 30 TAC § 115.352(1).</p> <p>Reciprocating Compressors Or Positive Displacement Pumps = The fugitive unit does not have reciprocating compressors or positive displacement pumps used in natural gas/gasoline processing operations.</p> <p>TVP 0.002 PSIA or Less = The fugitive unit has components or systems that contact a process fluid containing VOC having a true vapor pressure less than or equal to 0.002 psia at 68 degrees Fahrenheit.</p> <p>TVP of Process Fluid VOC &lt;= 0.044 PSIA AT 68° F = Process drains contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.</p> <p>TVP of Process Fluid VOC &lt;= 0.044 PSIA AT 68° F = Open-ended valves or lines do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.</p> <p>TVP of Process Fluid VOC &lt;= 0.044 PSIA AT 68° F = Pump seals contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.</p> <p>Complying with 30 TAC § 115.352(1) = Pump seals are complying with the requirements in 30 TAC § 115.352(1).</p> <p>TVP of Process Fluid VOC &lt;= 0.044 PSIA AT 68° F = Compressor seals do not contact a process fluid containing VOC having a true vapor pressures less than or equal to 0.044 psia at 68 degrees Fahrenheit.</p> <p>TVP of Process Fluid VOC &gt; 0.044 PSIA AT 68° F = Open-ended valves contact a process fluid containing VOC having a TVP greater than 0.044 psia at 68 degrees Fahrenheit.</p> <p>Complying With § 115.352(1) = Compressor seals are complying with the requirements in 30 TAC § 115.352(1).</p>
CEPFUG	40 CFR Part 63, Subpart CC	63CC-CEPFUG	<p>CLOSED VENT (OR VAPOR COLLECTION) SYSTEMS = YES</p> <p>COMPRESSOR IN HYDROGEN SERVICE = YES</p> <p>ENCLOSED COMBUSTION DEVICE = NO</p> <p>EXISTING SOURCE = YES</p> <p>FLARE = NO</p> <p>OPEN-ENDED VALVES OR LINES = YES</p> <p>PRESSURE RELIEF DEVICE IN GAS/VAPOR SERVICE = YES</p> <p>PRESSURE RELIEF DEVICE IN HEAVY LIQUID SERVICE = NO</p> <p>VACUUM SERVICE = NO</p> <p>VALVES IN HEAVY LIQUID SERVICE = YES</p> <p>VAPOR RECOVERY SYSTEM = YES</p> <p>CLOSED VENT (OR VAPOR COLLETION) SYSTEMS EQUIVALENT EMISSION LIMITATION = NO</p> <p>COMPLYING WITH TITLE 40 CFR 60 SUBPART VV = YES</p> <p>COMPRESSOR NOT IN HYDROGEN SERVICE = YES</p>

Unit ID	Regulation	Index Number	Basis of Determination*
			<p>EQUIVALENT EMISSION LIMIT = NO</p> <p>OPEN-ENDED VALVES OR LINES EQUIVALENT EMISSION LIMITATION = NO</p> <p>PRESSURE RELIEF DEVICE COMPLYING WITH § 60.482-4(A)-(B) = YES</p> <p>PUMP IN LIGHT LIQUID SERVICE = YES</p> <p>VALVES IN HEAVY LIQUID SERVICE EQUIVALENT EMISSION LIMITATION = NO</p> <p>VAPOR RECOVERY SYSTEM EQUIVALENT EMISSION LIMITATION = NO</p> <p>COMPRESSOR EQUIVALENT EMISSION LIMITATION = NO</p> <p>PRESSURE RELIEF DEVICES IN LIGHT LIQUID SERVICE = YES</p> <p>PUMP EQUIVALENT EMISSION LIMITATION = NO</p> <p>CLOSED VENT (OR VAPOR COLLETION) SYSTEMS COMPLYING WITH § 60.482-10 = YES</p> <p>COMPLYING WITH § 60.482-8 = YES</p> <p>EQUIVALENT EMISSION LIMIT = NO</p> <p>OPEN-ENDED VALVES OR LINES COMPLYING WITH § 60.482-6 = YES</p> <p>VALVES IN HEAVY LIQUID SERVICE COMPLYING WITH § 60.482-8 = YES</p> <p>VAPOR RECOVERY SYSTEM COMPLYING WITH § 60.482-10 = YES</p> <p>COMPRESSOR COMPLYING WITH § 60.482-3 = YES</p> <p>FLANGES AND OTHER CONNECTORS = YES</p> <p>PUMP COMPLYING WITH § 60.482-2 = YES</p> <p>SAMPLING CONNECTION SYSTEMS = YES</p> <p>VALVES IN GAS/VAPOR OR LIGHT LIQUID SERVICE = YES</p> <p>3COMPLYING WITH § 60.482-8 = YES</p> <p>FLANGES AND OTHER CONNECTORS EQUIVALENT EMISSION LIMITATION = NO</p> <p>PUMP IN HEAVY LIQUID SERVICE = YES</p> <p>SAMPLING CONNECTION SYSTEM EQUIVALENT EMISSION LIMITATION = NO</p> <p>VALVES IN GAS/VAPOR OR LIGHT LIQUID SERVICE EQUIVALENT EMISSION LIMITATION = NO</p> <p>PUMP EQUIVALENT EMISSION LIMITATION = NO</p> <p>FLANGES AND OTHER CONNECTORS COMPLYING WITH § 60.482-8 = YES</p> <p>SAMPLING CONNECTION SYSTEMS COMPLYING WITH § 60.482-5 = YES</p> <p>VALVES IN GAS/VAPOR OR LIGHT LIQUID SERVICE COMPLYING WITH § 60.482-7 = YES</p> <p>PUMP COMPLYING WITH § 60.482-8 = YES</p>
CRU5FE	40 CFR Part 63, Subpart CC	63CC-CRU5FE	<p>Existing Source = The heat exchange system is at a new source.</p> <p>Construction/Reconstruction Date = Construction or reconstruction of the heat exchange system commenced after August 18, 1995, but before September 4, 2007.</p> <p>Alternatives = The owner or operator is using the continuous operating parameters monitoring and recordkeeping provisions listed in § 63.655(i).</p>

Unit ID	Regulation	Index Number	Basis of Determination*
CRU5INTHT1	30 TAC Chapter 117, Subchapter B	R7201	Unit Type = Process heater Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1). Functionally Identical Replacement = Unit is not a functionally identical replacement.
CRU5INTHT1	40 CFR Part 63, Subpart DDDDD	63DDDDD-HTR	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.
CRU5INTHT1	40 CFR Part 60, Subpart J	60J-CRU5INTHT1	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.
CRU5INTHT2	30 TAC Chapter 117, Subchapter B	R7201	Unit Type = Process heater Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1). Functionally Identical Replacement = Unit is not a functionally identical replacement.
CRU5INTHT2	40 CFR Part 63, Subpart DDDDD	63DDDDD-HTR	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.
CRU5INTHT2	40 CFR Part 60, Subpart J	60J-CRU5INTHT2	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.
CRU5INTHT3	30 TAC Chapter 117, Subchapter B	R7201	Unit Type = Process heater Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1). Functionally Identical Replacement = Unit is not a functionally identical replacement.
CRU5INTHT3	40 CFR Part 63, Subpart DDDDD	63DDDDD-HTR	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.
CRU5INTHT3	40 CFR Part 60, Subpart J	60J-CRU5INTHT3	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.



Unit ID	Regulation	Index Number	Basis of Determination*
CRU5PLATHT	30 TAC Chapter 117, Subchapter B	R7201	Unit Type = Process heater Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1). Functionally Identical Replacement = Unit is not a functionally identical replacement.
CRU5PLATHT	40 CFR Part 63, Subpart DDDDD	63DDDDD-HTR	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.
CRU5PLATHT	40 CFR Part 60, Subpart J	60J-CRU5PLATHT	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.
DCU2ENG3102	40 CFR Part 60, Subpart IIII	60IIII-02	Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification after July 11, 2005. Diesel = Diesel fuel is used. Kilowatts = Power rating greater than or equal to 130 KW and less than or equal to 368 KW. Exemptions = The CI ICE is not exempt due to national security, testing at an engine test cell/stand or as a temporary replacement. Filter = The CI ICE is not equipped with a diesel particulate filter. Displacement = Displacement is less than 10 liters per cylinder. Service = CI ICE is a non-emergency engine. Commencing = CI ICE that is commencing new construction. Compliance Option = The CI ICE and control device is installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions. Generator Set = The CI ICE is not a generator set engine. Manufacture Date = Date of manufacture is after 04/01/2006. Model Year = CI ICE was manufactured in model year 2010. Install Date = The CI ICE was installed in 2012 through 2015.
DCU2ENG3102	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-03	HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2. Brake HP = Stationary RICE with a brake HP greater than or equal to 300 HP and less than or equal to 500 HP. Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006. Service Type = Normal use. Stationary RICE Type = Compression ignition engine

Unit ID	Regulation	Index Number	Basis of Determination*
DCU2ENG3124	40 CFR Part 60, Subpart IIII	60IIII-02	<p>Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification after July 11, 2005.</p> <p>Diesel = Diesel fuel is used.</p> <p>Kilowatts = Power rating greater than or equal to 130 KW and less than or equal to 368 KW.</p> <p>Exemptions = The CI ICE is not exempt due to national security, testing at an engine test cell/stand or as a temporary replacement.</p> <p>Filter = The CI ICE is not equipped with a diesel particulate filter.</p> <p>Displacement = Displacement is less than 10 liters per cylinder.</p> <p>Service = CI ICE is a non-emergency engine.</p> <p>Commencing = CI ICE that is commencing new construction.</p> <p>Compliance Option = The CI ICE and control device is installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions.</p> <p>Generator Set = The CI ICE is not a generator set engine.</p> <p>Manufacture Date = Date of manufacture is after 04/01/2006.</p> <p>Model Year = CI ICE was manufactured in model year 2010.</p> <p>Install Date = The CI ICE was installed in 2012 through 2015.</p>
DCU2ENG3124	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-03	<p>HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2.</p> <p>Brake HP = Stationary RICE with a brake HP greater than or equal to 300 HP and less than or equal to 500 HP.</p> <p>Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006.</p> <p>Service Type = Normal use.</p> <p>Stationary RICE Type = Compression ignition engine</p>
DCU2FE	40 CFR Part 63, Subpart CC	63CC-DCU2FE	<p>Existing Source = The heat exchange system is at a new source.</p> <p>Construction/Reconstruction Date = Construction or reconstruction of the heat exchange system commenced after August 18, 1995, but before September 4, 2007.</p> <p>Alternatives = The owner or operator is using the continuous operating parameters monitoring and recordkeeping provisions listed in § 63.655(i).</p>
EDCU2	30 TAC Chapter 111, Visible Emissions	R1111-EDCU2	<p>Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1.</p> <p>Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.</p> <p>Construction Date = Newest source routing emissions to the flare began construction after January 31, 1972.</p>
EDCU2	40 CFR Part 60, Subpart A	60A-EDCU2	<p>Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18.</p> <p>Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4).</p> <p>Flare Assist Type = Steam-assisted</p> <p>Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)</p>
EDCU2	40 CFR Part 60, Subpart Ja	60Ja-1	<p>Facility Type = Flare that is used for fuel gas combustion that does NOT meet requirements in § 60.107a(a)(3).</p> <p>Construction/Modification Date = After June 24, 2008</p> <p>Sulfur Emission Limit = Owner or operator is choosing SO<sub>2</sub> limit in terms of ppmv H<sub>2</sub>S in fuel gas.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
EHCU2	30 TAC Chapter 111, Visible Emissions	R1111-EHCU2	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. Construction Date = Newest source routing emissions to the flare began construction after January 31, 1972.
EHCU2	40 CFR Part 60, Subpart A	60A-EHCU2	Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Flare Assist Type = Steam-assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
EHCU2	40 CFR Part 60, Subpart Ja	60Ja-1	Facility Type = Flare that is used for fuel gas combustion that does NOT meet requirements in § 60.107a(a)(3). Construction/Modification Date = After June 24, 2008 Sulfur Emission Limit = Owner or operator is choosing SO <sub>2</sub> limit in terms of ppmv H <sub>2</sub> S in fuel gas.
ESBU2	30 TAC Chapter 111, Visible Emissions	R1111-ESBU2	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. Construction Date = Newest source routing emissions to the flare began construction after January 31, 1972.
ESBU2	40 CFR Part 60, Subpart A	60A-ESBU2	Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Flare Assist Type = Steam-assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
ESBU2	40 CFR Part 60, Subpart Ja	60Ja-1	Facility Type = Flare that is used for fuel gas combustion that does NOT meet requirements in § 60.107a(a)(3). Construction/Modification Date = After June 24, 2008 Sulfur Emission Limit = Owner or operator is choosing SO <sub>2</sub> limit in terms of ppmv H <sub>2</sub> S in fuel gas.
EVPS5	30 TAC Chapter 111, Visible Emissions	R1111-EVPS5	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions. Construction Date = Newest source routing emissions to the flare began construction after January 31, 1972.
EVPS5	40 CFR Part 60, Subpart A	60A-EVPS5	Subject to 40 CFR § 60.18 = Flare is subject to 40 CFR § 60.18. Adhering to Heat Content Specifications = Adhering to the heat content specifications in 40 CFR § 60.18(c)(3)(ii) and the maximum tip velocity specifications in 40 CFR § 60.18(c)(4). Flare Assist Type = Steam-assisted Flare Exit Velocity = Flare exit velocity is less than 60 ft/s (18.3 m/sec)
EVPS5	40 CFR Part 60, Subpart Ja	60Ja-1	Facility Type = Flare that is used for fuel gas combustion that does NOT meet requirements in § 60.107a(a)(3). Construction/Modification Date = After June 24, 2008 Sulfur Emission Limit = Owner or operator is choosing SO <sub>2</sub> limit in terms of ppmv H <sub>2</sub> S in fuel gas.
GRP-SW&RESEN	30 TAC Chapter 117, Subchapter B	R117-02	Horsepower Rating = HP is less than 300

Unit ID	Regulation	Index Number	Basis of Determination*
GRP-SW&RESEN	40 CFR Part 60, Subpart IIII	60IIII-01	<p>Applicability Date = Stationary CI ICE commenced construction, reconstruction, or modification after July 11, 2005.</p> <p>Diesel = Diesel fuel is used.</p> <p>Kilowatts = Power rating greater than or equal to 130 KW and less than or equal to 368 KW.</p> <p>Exemptions = The CI ICE is not exempt due to national security, testing at an engine test cell/stand or as a temporary replacement.</p> <p>Filter = The CI ICE is not equipped with a diesel particulate filter.</p> <p>Displacement = Displacement is less than 10 liters per cylinder.</p> <p>Service = CI ICE is a non-emergency engine.</p> <p>Commencing = CI ICE that is commencing new construction.</p> <p>Compliance Option = The CI ICE and control device is installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions.</p> <p>Generator Set = The CI ICE is not a generator set engine.</p> <p>Manufacture Date = Date of manufacture is after 04/01/2006.</p> <p>Model Year = CI ICE was manufactured in model year 2008.</p>
GRP-SW&RESEN	40 CFR Part 63, Subpart ZZZZ	63ZZZZ-02	<p>HAP Source = Any stationary source or group of stationary sources of hazardous air pollutants meeting the definition of a major source as described in 40 CFR § 63.2.</p> <p>Brake HP = Stationary RICE with a brake HP greater than or equal to 250 HP and less than 300 HP.</p> <p>Construction/Reconstruction Date = Commenced construction or reconstruction on or after June 12, 2006.</p> <p>Service Type = Normal use.</p> <p>Stationary RICE Type = Compression ignition engine</p>
GTG41	30 TAC Chapter 117, Subchapter B	R7201-GTG41	<p>Megawatt Rating = MR is greater than or equal to 30 MW.</p> <p>RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020.</p> <p>Functionally Identical Replacement = The stationary gas turbine is not a functionally identical replacement for a unit or group of units.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
GTG41	40 CFR Part 60, Subpart KKKK	60KKKK-GTG41	<p>75% of Peak = The combustion turbine does not operate at less than 75% of peak load or at temperatures less than zero degrees F.</p> <p>Unit Type = Heat Recovery Steam Generating Unit</p> <p>Construction/Modification Date = Turbine was constructed after February 18, 2005.</p> <p>SO<sub>2</sub> Standard = The output-based SO<sub>2</sub> emission standard in § 60.4330(a)(1) is being used.</p> <p>Heat Input = Turbine has a heat input at peak load of at least 50 MMBtu/hr but less than 850 MMBtu/hr.</p> <p>Turbine Use = Turbine is used for electric generation.</p> <p>NO<sub>x</sub> Control = NO<sub>x</sub> emissions are not being controlled by steam or water injection.</p> <p>Subject to Da = The combustion turbine is not located at an integrated gasification combined cycle electric utility steam generating unit subject to Subpart Da of Part 60.</p> <p>NO<sub>x</sub> Monitoring = A diluent NO<sub>x</sub> CEMS is used.</p> <p>Performance Test = Sulfur content of the fuel combusted in the turbine is being periodically determined.</p> <p>Service Type = Service other than emergency service, as defined in § 60.4420(i), or research and development.</p> <p>Intermediate Storage = Fuel is supplied directly without intermediate storage.</p> <p>NO<sub>x</sub> Standard = The output-based NO<sub>x</sub> emission standard in Table 1 is being used.</p> <p>Fuel Schedules = No custom fuel monitoring schedule is used.</p> <p>Fuel Type = Only gaseous fuel, &gt; 50% natural gas.</p>
GTG41	40 CFR Part 63, Subpart YYYY	63YYYY-GTG41	<p>Construction/Reconstruction Date = Turbine was constructed, modified or reconstructed after 1/14/2003.</p> <p>Rate Peak Power Output = Power output rating is one megawatt or greater.</p> <p>Type of Service = Turbine is used in non-emergency service.</p> <p>Fuel Fired = Turbine is fired with natural gas.</p>
GTG42	30 TAC Chapter 117, Subchapter B	R7201-GTG42	<p>Megawatt Rating = MR is greater than or equal to 30 MW.</p> <p>RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020.</p> <p>Functionally Identical Replacement = The stationary gas turbine is not a functionally identical replacement for a unit or group of units.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
GTG42	40 CFR Part 60, Subpart KKKK	60KKKK-GTG42	<p>75% of Peak = The combustion turbine does not operate at less than 75% of peak load or at temperatures less than zero degrees F.</p> <p>Unit Type = Heat Recovery Steam Generating Unit</p> <p>Construction/Modification Date = Turbine was constructed after February 18, 2005.</p> <p>SO<sub>2</sub> Standard = The output-based SO<sub>2</sub> emission standard in § 60.4330(a)(1) is being used.</p> <p>Heat Input = Turbine has a heat input at peak load of at least 50 MMBtu/hr but less than 850 MMBtu/hr.</p> <p>Turbine Use = Turbine is used for electric generation.</p> <p>NO<sub>x</sub> Control = NO<sub>x</sub> emissions are not being controlled by steam or water injection.</p> <p>Subject to Da = The combustion turbine is not located at an integrated gasification combined cycle electric utility steam generating unit subject to Subpart Da of Part 60.</p> <p>NO<sub>x</sub> Monitoring = A diluent NO<sub>x</sub> CEMS is used.</p> <p>Performance Test = Sulfur content of the fuel combusted in the turbine is being periodically determined.</p> <p>Service Type = Service other than emergency service, as defined in § 60.4420(i), or research and development.</p> <p>Common Steam Header = A steam header with one or more combustion turbines is utilized.</p> <p>Intermediate Storage = Fuel is supplied directly without intermediate storage.</p> <p>NO<sub>x</sub> Standard = The output-based NO<sub>x</sub> emission standard in Table 1 is being used.</p> <p>Duct Burner = The heat recovery system includes a duct burner.</p> <p>Fuel Schedules = No custom fuel monitoring schedule is used.</p> <p>Fuel Type = Only gaseous fuel, &gt; 50% natural gas.</p>
GTG42	40 CFR Part 63, Subpart YYYY	63YYYY-GTG42	<p>Construction/Reconstruction Date = Turbine was constructed, modified or reconstructed after 1/14/2003.</p> <p>Rate Peak Power Output = Power output rating is one megawatt or greater.</p> <p>Type of Service = Turbine is used in non-emergency service.</p> <p>Fuel Fired = Turbine is fired with natural gas.</p> <p>Oxidation Catalyst = The turbine is controlled with an oxidation catalyst.</p> <p>Previous Performance Test = No previous performance test was conducted.</p> <p>Distillate Oil Fired = No quantity of distillate oil is used to fire any new or existing stationary combustion turbine which is located at the same major source as the gas-fired stationary turbine.</p>
GTG43	30 TAC Chapter 117, Subchapter B	R7201-GTG43	<p>Megawatt Rating = MR is greater than or equal to 30 MW.</p> <p>RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020.</p> <p>Functionally Identical Replacement = The stationary gas turbine is not a functionally identical replacement for a unit or group of units.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
GTG43	40 CFR Part 60, Subpart KKKK	60KKKK-GTG43	<p>75% of Peak = The combustion turbine does not operate at less than 75% of peak load or at temperatures less than zero degrees F.</p> <p>Unit Type = Heat Recovery Steam Generating Unit</p> <p>Construction/Modification Date = Turbine was constructed after February 18, 2005.</p> <p>SO<sub>2</sub> Standard = The output-based SO<sub>2</sub> emission standard in § 60.4330(a)(1) is being used.</p> <p>Heat Input = Turbine has a heat input at peak load of at least 50 MMBtu/hr but less than 850 MMBtu/hr.</p> <p>Turbine Use = Turbine is used for electric generation.</p> <p>NO<sub>x</sub> Control = NO<sub>x</sub> emissions are not being controlled by steam or water injection.</p> <p>Subject to Da = The combustion turbine is not located at an integrated gasification combined cycle electric utility steam generating unit subject to Subpart Da of Part 60.</p> <p>NO<sub>x</sub> Monitoring = A diluent NO<sub>x</sub> CEMS is used.</p> <p>Performance Test = Sulfur content of the fuel combusted in the turbine is being periodically determined.</p> <p>Service Type = Service other than emergency service, as defined in § 60.4420(i), or research and development.</p> <p>Common Steam Header = A steam header with one or more combustion turbines is utilized.</p> <p>Intermediate Storage = Fuel is supplied directly without intermediate storage.</p> <p>NO<sub>x</sub> Standard = The output-based NO<sub>x</sub> emission standard in Table 1 is being used.</p> <p>Duct Burner = The heat recovery system includes a duct burner.</p> <p>Fuel Schedules = No custom fuel monitoring schedule is used.</p> <p>Fuel Type = Only gaseous fuel, &gt; 50% natural gas.</p>
GTG43	40 CFR Part 63, Subpart YYYY	63YYYY-GTG43	<p>Construction/Reconstruction Date = Turbine was constructed, modified or reconstructed after 1/14/2003.</p> <p>Rate Peak Power Output = Power output rating is one megawatt or greater.</p> <p>Type of Service = Turbine is used in non-emergency service.</p> <p>Fuel Fired = Turbine is fired with natural gas.</p> <p>Oxidation Catalyst = The turbine is controlled with an oxidation catalyst.</p> <p>Previous Performance Test = No previous performance test was conducted.</p> <p>Distillate Oil Fired = No quantity of distillate oil is used to fire any new or existing stationary combustion turbine which is located at the same major source as the gas-fired stationary turbine.</p>
GTG44	30 TAC Chapter 117, Subchapter B	R7201-GTG44	<p>Megawatt Rating = MR is greater than or equal to 30 MW.</p> <p>RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020.</p> <p>Functionally Identical Replacement = The stationary gas turbine is not a functionally identical replacement for a unit or group of units.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
GTG44	40 CFR Part 60, Subpart KKKK	60KKKK-GTG44	<p>75% of Peak = The combustion turbine does not operate at less than 75% of peak load or at temperatures less than zero degrees F.</p> <p>Unit Type = Heat Recovery Steam Generating Unit</p> <p>Construction/Modification Date = Turbine was constructed after February 18, 2005.</p> <p>SO<sub>2</sub> Standard = The output-based SO<sub>2</sub> emission standard in § 60.4330(a)(1) is being used.</p> <p>Heat Input = Turbine has a heat input at peak load of at least 50 MMBtu/hr but less than 850 MMBtu/hr.</p> <p>Turbine Use = Turbine is used for electric generation.</p> <p>NO<sub>x</sub> Control = NO<sub>x</sub> emissions are not being controlled by steam or water injection.</p> <p>Subject to Da = The combustion turbine is not located at an integrated gasification combined cycle electric utility steam generating unit subject to Subpart Da of Part 60.</p> <p>NO<sub>x</sub> Monitoring = A diluent NO<sub>x</sub> CEMS is used.</p> <p>Performance Test = Sulfur content of the fuel combusted in the turbine is being periodically determined.</p> <p>Service Type = Service other than emergency service, as defined in § 60.4420(i), or research and development.</p> <p>Common Steam Header = A steam header with one or more combustion turbines is utilized.</p> <p>Intermediate Storage = Fuel is supplied directly without intermediate storage.</p> <p>NO<sub>x</sub> Standard = The output-based NO<sub>x</sub> emission standard in Table 1 is being used.</p> <p>Duct Burner = The heat recovery system includes a duct burner.</p> <p>Fuel Schedules = No custom fuel monitoring schedule is used.</p> <p>Fuel Type = Only gaseous fuel, &gt; 50% natural gas.</p>
GTG44	40 CFR Part 63, Subpart YYYY	63YYYY-GTG44	<p>Construction/Reconstruction Date = Turbine was constructed, modified or reconstructed after 1/14/2003.</p> <p>Rate Peak Power Output = Power output rating is one megawatt or greater.</p> <p>Type of Service = Turbine is used in non-emergency service.</p> <p>Fuel Fired = Turbine is fired with natural gas.</p> <p>Oxidation Catalyst = The turbine is controlled with an oxidation catalyst.</p> <p>Previous Performance Test = No previous performance test was conducted.</p> <p>Distillate Oil Fired = No quantity of distillate oil is used to fire any new or existing stationary combustion turbine which is located at the same major source as the gas-fired stationary turbine.</p>
HCU2DHTH1	30 TAC Chapter 117, Subchapter B	R7201	<p>Unit Type = Process heater</p> <p>Maximum Rated Capacity = Maximum rated capacity is at least 40 MMBtu/hr, but less than 100 MMBtu/hr.</p> <p>RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1).</p> <p>Functionally Identical Replacement = Unit is not a functionally identical replacement.</p>
HCU2DHTH1	40 CFR Part 63, Subpart DDDDD	63DDDDD-HTR	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.



Unit ID	Regulation	Index Number	Basis of Determination*
HCU2DHTH1	40 CFR Part 60, Subpart J	60J-HCU2DHTH1	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.
HCU2H1A	30 TAC Chapter 117, Subchapter B	R7201	Unit Type = Process heater Maximum Rated Capacity = Maximum rated capacity is at least 40 MMBtu/hr, but less than 100 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1). Functionally Identical Replacement = Unit is not a functionally identical replacement.
HCU2H1A	40 CFR Part 63, Subpart DDDDD	63DDDDDD-HTR	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.
HCU2H1A	40 CFR Part 60, Subpart J	60J-HCU2H1A	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.
HCU2H1B	30 TAC Chapter 117, Subchapter B	R7201	Unit Type = Process heater Maximum Rated Capacity = Maximum rated capacity is at least 40 MMBtu/hr, but less than 100 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1). Functionally Identical Replacement = Unit is not a functionally identical replacement.
HCU2H1B	40 CFR Part 63, Subpart DDDDD	63DDDDDD-HTR	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.
HCU2H1B	40 CFR Part 60, Subpart J	60J-HCU2H1B	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.
HCU2H2	30 TAC Chapter 117, Subchapter B	R7201	Unit Type = Process heater Maximum Rated Capacity = Maximum rated capacity is at least 40 MMBtu/hr, but less than 100 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1). Functionally Identical Replacement = Unit is not a functionally identical replacement.
HCU2H2	40 CFR Part 63, Subpart DDDDD	63DDDDDD-HTR	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.
HCU2H2	40 CFR Part 60, Subpart J	60J-HCU2H2	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.

Unit ID	Regulation	Index Number	Basis of Determination*
HRSG41	40 CFR Part 60, Subpart J	60J-HRSG41	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.
HRSG42	40 CFR Part 60, Subpart J	60J-HRSG42	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.
HRSG43	40 CFR Part 60, Subpart J	60J-HRSG43	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.
HRSG44	40 CFR Part 60, Subpart J	60J-HRSG44	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.
HTU6CHGH1	30 TAC Chapter 117, Subchapter B	R7201	Unit Type = Process heater Maximum Rated Capacity = Maximum rated capacity is at least 40 MMBtu/hr, but less than 100 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1). Functionally Identical Replacement = Unit is not a functionally identical replacement.
HTU6CHGH1	40 CFR Part 63, Subpart DDDDD	63DDDDD-HTR	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.
HTU6CHGH1	40 CFR Part 60, Subpart J	60J-HTU6CHGH1	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.
HTU6CHGH2	30 TAC Chapter 117, Subchapter B	R7201	Unit Type = Process heater Maximum Rated Capacity = Maximum rated capacity is at least 40 MMBtu/hr, but less than 100 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1). Functionally Identical Replacement = Unit is not a functionally identical replacement.
HTU6CHGH2	40 CFR Part 63, Subpart DDDDD	63DDDDD-HTR	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.

Unit ID	Regulation	Index Number	Basis of Determination*
HTU6CHGH2	40 CFR Part 60, Subpart J	60J-HTU6CHGH2	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.
NHTU2CHT	30 TAC Chapter 117, Subchapter B	R7201	Unit Type = Process heater Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1). Functionally Identical Replacement = Unit is not a functionally identical replacement.
NHTU2CHT	40 CFR Part 63, Subpart DDDDD	63DDDDDD-HTR	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.
NHTU2CHT	40 CFR Part 60, Subpart J	60J-NHTU2CHT	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.
NHTU2SPLT	30 TAC Chapter 117, Subchapter B	R7201	Unit Type = Process heater Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1). Functionally Identical Replacement = Unit is not a functionally identical replacement.
NHTU2SPLT	40 CFR Part 63, Subpart DDDDD	63DDDDDD-HTR	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.
NHTU2SPLT	40 CFR Part 60, Subpart J	60J-NHTU2SPLT	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.
NHTU2STRP	30 TAC Chapter 117, Subchapter B	R7201	Unit Type = Process heater Maximum Rated Capacity = Maximum rated capacity is at least 100 MMBtu/hr, but less than 200 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1). Functionally Identical Replacement = Unit is not a functionally identical replacement.
NHTU2STRP	40 CFR Part 63, Subpart DDDDD	63DDDDDD-HTR	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.
NHTU2STRP	40 CFR Part 60, Subpart J	60J-NHTU2STRP	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.

Unit ID	Regulation	Index Number	Basis of Determination*
PAINT	30 TAC Chapter 115, Surface Coating Operations	R5420-PAINT	<p>Alternate Requirements = No alternate requirement to 30 TAC §§ 115.421(a)(9) or 115.421(b)(8) has been approved or no alternate has been requested.</p> <p>Alternative Compliance Method = No alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria has been approved by the TCEQ Executive Director or no such alternate has been requested.</p> <p>Facility Operations = Other miscellaneous metal parts and products coating.</p> <p>Miscellaneous Coating Type = Coating type other than low-bake coatings, coating using air or forced air dryers, extreme performance and clear coat/interior protective coating for pails and drums.</p> <p>VOC Emission Rate = Uncontrolled emission rates not qualifying for exemption from control.</p> <p>Vapor Recovery = No vapor recovery system is used to control emissions.</p>
PRO SRU 4	30 TAC Chapter 112, Sulfur Compounds	R112-01	<p>Sulfur Recovery Plant = The gas sweetening unit is using sulfur recovery.</p> <p>Stack Height = Effective stack height less than standard effective stack height.</p>
PRO SRU 4	40 CFR Part 60, Subpart J	60J-02	<p>Facility Type = Claus sulfur recovery plant with a design capacity for sulfur feed greater than 20 LTPD with reduction control systems followed by incineration.</p> <p>Construction/Modification Date = After October 4, 1976 and on or before May 14, 2007.</p>
PRO SRU 4	40 CFR Part 60, Subpart Ja	60Ja-01	<p>Facility Type = Sulfur recovery plant greater than 20 long tons per day.</p> <p>Construction/Modification Date = On or before May 14, 2007.</p>
PRO SRU 5-1	30 TAC Chapter 112, Sulfur Compounds	112SRU5-1	<p>Sulfur Recovery Plant = The gas sweetening unit is using sulfur recovery.</p> <p>Stack Height = Effective stack height less than standard effective stack height.</p>
PRO SRU 6-1	30 TAC Chapter 112, Sulfur Compounds	112SRU6-1	<p>Sulfur Recovery Plant = The gas sweetening unit is using sulfur recovery.</p> <p>Stack Height = Effective stack height less than standard effective stack height.</p>
PRO SRU 7-1	30 TAC Chapter 112, Sulfur Compounds	112SRU7-1	<p>Sulfur Recovery Plant = The gas sweetening unit is using sulfur recovery.</p> <p>Stack Height = Effective stack height less than standard effective stack height.</p>
PRO SRU2&3	30 TAC Chapter 112, Sulfur Compounds	R112-01	<p>Sulfur Recovery Plant = The gas sweetening unit is using sulfur recovery.</p> <p>Stack Height = Effective stack height less than standard effective stack height.</p>
PRO SRU2&3	40 CFR Part 60, Subpart J	60J-01	<p>Facility Type = Claus sulfur recovery plant with a design capacity for sulfur feed greater than 20 LTPD with reduction control systems followed by incineration.</p> <p>Construction/Modification Date = On or before October 4, 1976.</p>
PRO SRU2&3	40 CFR Part 60, Subpart Ja	60Ja-01	<p>Facility Type = Sulfur recovery plant greater than 20 long tons per day.</p> <p>Construction/Modification Date = On or before May 14, 2007.</p>
SCHCU2-5	30 TAC Chapter 117, Subchapter B	R7201	<p>Unit Type = Process heater</p> <p>Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr.</p> <p>RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1).</p> <p>Functionally Identical Replacement = Unit is not a functionally identical replacement.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
SCHCU2-5	40 CFR Part 63, Subpart DDDDD	63DDDDD-HTR	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.
SCHCU2-5	40 CFR Part 60, Subpart J	60J-SCHCU2-5	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.
SCRU5-1	30 TAC Chapter 111, Visible Emissions	R1111-SCRU5-1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.
SCRU5-1	30 TAC Chapter 115, Vent Gas Controls	R5112-SCRU5-1	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is from a combustion unit exhaust and the combustion unit is not used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.
SCRU5-2	30 TAC Chapter 111, Visible Emissions	R1111-SCRU5-2	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.
SCRU5-2	30 TAC Chapter 115, Vent Gas Controls	R5112-SCRU5-2	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is from a combustion unit exhaust and the combustion unit is not used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.
SCRU5-3	30 TAC Chapter 111, Visible Emissions	R1111-SCRU5-3	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Total Feed Capacity = Total feed capacity is greater than 20,000 barrels per day. Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.

Unit ID	Regulation	Index Number	Basis of Determination*
SCRU5-3	30 TAC Chapter 115, Vent Gas Controls	R5112-SCRU5-3	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is from a combustion unit exhaust and the combustion unit is not used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.
SDCU2-1	30 TAC Chapter 117, Subchapter B	R7201	Unit Type = Process heater Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1). Functionally Identical Replacement = Unit is not a functionally identical replacement.
SDCU2-1	40 CFR Part 63, Subpart DDDDD	63DDDDDD-HTR	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.
SDCU2-1	40 CFR Part 60, Subpart J	60J-SDCU2-1	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.
SDCU2-2	30 TAC Chapter 117, Subchapter B	R7201	Unit Type = Process heater Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1). Functionally Identical Replacement = Unit is not a functionally identical replacement.
SDCU2-2	40 CFR Part 63, Subpart DDDDD	63DDDDDD-HTR	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.
SDCU2-2	40 CFR Part 60, Subpart J	60J-SDCU2-2	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.
SDCU2-3	30 TAC Chapter 117, Subchapter B	R7201	Unit Type = Process heater Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1). Functionally Identical Replacement = Unit is not a functionally identical replacement.
SDCU2-3	40 CFR Part 63, Subpart DDDDD	63DDDDDD-HTR	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.
SDCU2-3	40 CFR Part 60, Subpart J	60J-SDCU2-3	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.

Unit ID	Regulation	Index Number	Basis of Determination*
SHCU2-5	30 TAC Chapter 111, Visible Emissions	R1111-SHCU2-5	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.</p>
SHCU2-5	30 TAC Chapter 115, Vent Gas Controls	R5112-SHCU2-5	<p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is from a combustion unit exhaust and the combustion unit is not used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p>
SNHTU2-3	30 TAC Chapter 111, Visible Emissions	R1111-SNHTU2-3	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.</p>
SNHTU2-3	30 TAC Chapter 115, Vent Gas Controls	R5112-SNHTU2-3	<p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is from a combustion unit exhaust and the combustion unit is not used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p>
SPS4-1	30 TAC Chapter 111, Visible Emissions	R1111-SPS4-1	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.</p>
SPS4-1	30 TAC Chapter 115, Vent Gas Controls	R5112-SPS4-1	<p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is from a combustion unit exhaust and the combustion unit is not used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
SPS4-2	30 TAC Chapter 111, Visible Emissions	R1111-SPS4-2	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.</p>
SPS4-2	30 TAC Chapter 115, Vent Gas Controls	R5112-SPS4-2	<p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is from a combustion unit exhaust and the combustion unit is not used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p>
SPS4-3	30 TAC Chapter 111, Visible Emissions	R1111-SPS4-3	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.</p>
SPS4-3	30 TAC Chapter 115, Vent Gas Controls	R5112-SPS4-3	<p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is from a combustion unit exhaust and the combustion unit is not used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p>
SPS4-4	30 TAC Chapter 111, Visible Emissions	R1111-SPS4-4	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.</p>
SPS4-4	30 TAC Chapter 115, Vent Gas Controls	R5112-SPS4-4	<p>Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source.</p> <p>Combustion Exhaust = The vent stream is from a combustion unit exhaust and the combustion unit is not used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.</p>
SRU5	40 CFR Part 60, Subpart J	60J-SRU5	<p>Facility Type = Claus sulfur recovery plant with a design capacity for sulfur feed greater than 20 LTPD with reduction control systems followed by incineration.</p> <p>Construction/Modification Date = After October 4, 1976 and on or before May 14, 2007.</p>



Unit ID	Regulation	Index Number	Basis of Determination*
SRU6	40 CFR Part 60, Subpart J	60J-SRU6	Facility Type = Claus sulfur recovery plant with a design capacity for sulfur feed greater than 20 LTPD with reduction control systems followed by incineration. Construction/Modification Date = After October 4, 1976 and on or before May 14, 2007.
SRU7	40 CFR Part 60, Subpart J	60J-SRU7	Facility Type = Claus sulfur recovery plant with a design capacity for sulfur feed greater than 20 LTPD with reduction control systems followed by incineration. Construction/Modification Date = After October 4, 1976 and on or before May 14, 2007.
STGTU1-1	40 CFR Part 60, Subpart J	60J-03	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.
STGTU1-1	40 CFR Part 63, Subpart UUU	63UUU-01	SRU Emission Limitation = Claus SRU part of sulfur recovery plant greater than or equal to 20 long tons/day using oxidation or reduction system followed by incineration subject to 250 ppmv SO <sub>2</sub> emission limit in §60.104(a)(2). SRU Monitoring Method = Instrument having an air or SO <sub>2</sub> dilution and oxidation system to convert reduced sulfur to SO <sub>2</sub> for continuously monitoring and recording the concentration at zero percent excess air of the resultant SO <sub>2</sub> . SRU Bypass Line = No bypass line serving the SRU.
STGTU1-2	40 CFR Part 60, Subpart J	60J-04	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.
STGTU2-1	40 CFR Part 60, Subpart J	60J-03	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.
STGTU2-1	40 CFR Part 63, Subpart UUU	63UUU-01	SRU Emission Limitation = Claus SRU part of sulfur recovery plant greater than or equal to 20 long tons/day using oxidation or reduction system followed by incineration subject to 250 ppmv SO <sub>2</sub> emission limit in §60.104(a)(2). SRU Monitoring Method = Instrument having an air or SO <sub>2</sub> dilution and oxidation system to convert reduced sulfur to SO <sub>2</sub> for continuously monitoring and recording the concentration at zero percent excess air of the resultant SO <sub>2</sub> . SRU Bypass Line = No bypass line serving the SRU.
STGTU2-2	40 CFR Part 60, Subpart J	60J-04	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.

Unit ID	Regulation	Index Number	Basis of Determination*
STGTU5-1	40 CFR Part 60, Subpart J	60J-STGTU5-1	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.
STGTU6-1	40 CFR Part 60, Subpart J	60J-STGTU6-1	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.
STGTU7-1	40 CFR Part 60, Subpart J	60J-STGTU7-1	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.
SVPS5-1	30 TAC Chapter 111, Visible Emissions	R1111-SVPS5-1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.
SVPS5-1	30 TAC Chapter 115, Vent Gas Controls	R5112-SVPS5-1	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is from a combustion unit exhaust and the combustion unit is not used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.
SVPS5-2	30 TAC Chapter 111, Visible Emissions	R1111-SVPS5-2	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is at least 100,000 actual cubic feet per minute.
SVPS5-2	30 TAC Chapter 115, Vent Gas Controls	R5112-SVPS5-2	Chapter 115 Division = The vent stream does not originate from a source for which another Division in 30 TAC Chapter 115 establishes a control requirement, emission specification, or exemption for that source. Combustion Exhaust = The vent stream is from a combustion unit exhaust and the combustion unit is not used as a control device for a vent stream originating from a noncombustion source subject to 30 TAC Chapter 115, Subchapter B, Division 2.

Unit ID	Regulation	Index Number	Basis of Determination*
TK 1908	30 TAC Chapter 115, Storage of VOCs	R5111	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
TK 1937	30 TAC Chapter 115, Storage of VOCs	R5111	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
TK 1937	40 CFR Part 63, Subpart CC	63CC-TK1937	<p>Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6).</p> <p>Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I.</p> <p>Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb.</p> <p>Group 1 Storage Vessel = The storage vessel is a Group 2 vessel.</p> <p>Applicability = The storage vessel is required to comply with 40 CFR Part 63, Subpart CC and is part of a process unit.</p>
TK 1938	30 TAC Chapter 115, Storage of VOCs	R5111	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
TK 1938	40 CFR Part 61, Subpart FF	61FF-TK1938	<p>Tank Control Requirements = The waste managed in the tank meets the conditions in 40 CFR § 61.343(b)(1) and the tank is complying with the requirements specified in 40 CFR § 61.343(b)(2).</p> <p>Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF.</p> <p>Alternative Standard for Tanks = The tank is not complying with the alternative standards in 40 CFR § 61.351.</p> <p>Fuel Gas System = Gaseous emissions from the tank or enclosure are routed to a fuel gas system.</p> <p>Alternative Means of Compliance = Not using an alternate means of compliance to meet the requirements of 40 CFR § 61.343 for tanks.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
TK 1939	30 TAC Chapter 115, Storage of VOCs	R5111	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
TK 1939	40 CFR Part 61, Subpart FF	61FF-TK1939	<p>Tank Control Requirements = The waste managed in the tank meets the conditions in 40 CFR § 61.343(b)(1) and the tank is complying with the requirements specified in 40 CFR § 61.343(b)(2).</p> <p>Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF.</p> <p>Alternative Standard for Tanks = The tank is not complying with the alternative standards in 40 CFR § 61.351.</p> <p>Fuel Gas System = Gaseous emissions from the tank or enclosure are routed to a fuel gas system.</p> <p>Alternative Means of Compliance = Not using an alternate means of compliance to meet the requirements of 40 CFR § 61.343 for tanks.</p>
TK 2067	30 TAC Chapter 115, Storage of VOCs	R5112-TK2067	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Welded tank using an external floating roof</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Primary Seal = Mechanical shoe</p> <p>Product Stored = Crude oil and/or condensate</p> <p>Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
TK 2067	40 CFR Part 63, Subpart CC	63CC-TK2067	<p>Existing Source = The storage vessel is at a new source.</p> <p>Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6).</p> <p>Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I.</p> <p>True Vapor Pressure = Maximum true vapor pressure of the total organic HAPs in the liquid is less than 11.11 psi (76.6 kPa)</p> <p>Emission Control Type = External floating roof</p> <p>Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb.</p> <p>Group 1 Storage Vessel = The storage vessel is a Group 1 storage vessel (as defined in 40 CFR § 63.641)</p> <p>Seal Type = Two seals, one above the other, the primary seal being a metallic shoe seal</p>

Unit ID	Regulation	Index Number	Basis of Determination*
TK 2068	30 TAC Chapter 115, Storage of VOCs	R5112-TK2068	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Welded tank using an external floating roof</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Primary Seal = Mechanical shoe</p> <p>Product Stored = Crude oil and/or condensate</p> <p>Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
TK 2068	40 CFR Part 63, Subpart CC	63CC-TK2068	<p>Existing Source = The storage vessel is at a new source.</p> <p>Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6).</p> <p>Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I.</p> <p>True Vapor Pressure = Maximum true vapor pressure of the total organic HAPs in the liquid is less than 11.11 psi (76.6 kPa)</p> <p>Emission Control Type = External floating roof</p> <p>Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb.</p> <p>Group 1 Storage Vessel = The storage vessel is a Group 1 storage vessel (as defined in 40 CFR § 63.641)</p> <p>Seal Type = Two seals, one above the other, the primary seal being a metallic shoe seal</p>
TK 2069	30 TAC Chapter 115, Storage of VOCs	R5112-TK2069	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Welded tank using an external floating roof</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Primary Seal = Mechanical shoe</p> <p>Product Stored = Crude oil and/or condensate</p> <p>Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
TK 2069	40 CFR Part 63, Subpart CC	63CC-TK2069	<p>Existing Source = The storage vessel is at a new source.</p> <p>Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6).</p> <p>Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I.</p> <p>True Vapor Pressure = Maximum true vapor pressure of the total organic HAPs in the liquid is less than 11.11 psi (76.6 kPa)</p> <p>Emission Control Type = External floating roof</p> <p>Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb.</p> <p>Group 1 Storage Vessel = The storage vessel is a Group 1 storage vessel (as defined in 40 CFR § 63.641)</p> <p>Seal Type = Two seals, one above the other, the primary seal being a metallic shoe seal</p>

Unit ID	Regulation	Index Number	Basis of Determination*
TK 2073	30 TAC Chapter 115, Storage of VOCs	R5111	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
TK 2073	40 CFR Part 60, Subpart QQQ	60QQQ-TK2073	<p>Construction/Modification Date = After May 4, 1987</p> <p>Control Device Type = No control device</p> <p>Alternate Means of Emission Limitation = The EPA Administrator has not approved an alternate means of emission limitation.</p> <p>Alternative Monitoring = No alternative operational or process parameter is monitored.</p> <p>Alternative Standard = The storage vessel, slop oil tank, or auxiliary tank is equipped with a floating roof.</p>
TK 2074	30 TAC Chapter 115, Storage of VOCs	R5111	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
TK 2074	40 CFR Part 60, Subpart QQQ	60QQQ-TK2074	<p>Construction/Modification Date = After May 4, 1987</p> <p>Control Device Type = No control device</p> <p>Alternate Means of Emission Limitation = The EPA Administrator has not approved an alternate means of emission limitation.</p> <p>Alternative Monitoring = No alternative operational or process parameter is monitored.</p> <p>Alternative Standard = The storage vessel, slop oil tank, or auxiliary tank is equipped with a floating roof.</p>
TK 2075	30 TAC Chapter 115, Storage of VOCs	R5111	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
TK 2075	40 CFR Part 60, Subpart Kb	60Kb-TK 2075	<p>Product Stored = Waste mixture of indeterminate or variable composition</p> <p>Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters)</p> <p>Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia</p>

Unit ID	Regulation	Index Number	Basis of Determination*
TK 2075	40 CFR Part 60, Subpart QQQ	60QQQ-TK2075	<p>Construction/Modification Date = After May 4, 1987</p> <p>Control Device Type = VOC recovery device other than a carbon adsorber</p> <p>Alternate Means of Emission Limitation = The EPA Administrator has not approved an alternate means of emission limitation.</p> <p>Alternative Monitoring = No alternative operational or process parameter is monitored.</p> <p>Alternative Standard = The storage vessel, slop oil tank, or auxiliary tank is not equipped with a floating roof.</p> <p>Subject to 40 CFR Part 60, Subpart K, Ka or Kb = No</p>
TK 2075	40 CFR Part 63, Subpart CC	63CC-TK2075	<p>Closed Vent System = Closed vent system is operated and maintained under negative pressure.</p> <p>Existing Source = The storage vessel is at a new source.</p> <p>Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6).</p> <p>Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I.</p> <p>True Vapor Pressure = Maximum true vapor pressure of the total organic HAPs in the liquid is less than 11.11 psi (76.6 kPa)</p> <p>By-pass Lines = Closed vent system has no by-pass lines.</p> <p>Emission Control Type = Closed vent system and control device</p> <p>Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb.</p> <p>Control Device Type = Control device other than a flare, thermal oxidizer, carbon adsorber, condenser or enclosed combustion device meeting residence time and temperature requirements.</p> <p>Group 1 Storage Vessel = The storage vessel is a Group 1 storage vessel (as defined in 40 CFR § 63.641)</p> <p>Control Device Design = The control device was installed after July 15, 1994 or was not designed to reduce inlet emission of total organic hazardous air pollutants by greater than or equal to 90% but less than 95%.</p> <p>Design Evaluation Submitted = Results of performance test were submitted to demonstrate compliance with 40 CFR § 63.119(e).</p>
TK 2076	30 TAC Chapter 115, Storage of VOCs	R5111	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
TK 2076	40 CFR Part 60, Subpart Kb	60Kb-TK 2076	<p>Product Stored = Waste mixture of indeterminate or variable composition</p> <p>Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters)</p> <p>Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia</p>
TK 2076	40 CFR Part 60, Subpart QQQ	60QQQ-TK2076	<p>Construction/Modification Date = After May 4, 1987</p> <p>Control Device Type = VOC recovery device other than a carbon adsorber</p> <p>Alternate Means of Emission Limitation = The EPA Administrator has not approved an alternate means of emission limitation.</p> <p>Alternative Monitoring = No alternative operational or process parameter is monitored.</p> <p>Alternative Standard = The storage vessel, slop oil tank, or auxiliary tank is not equipped with a floating roof.</p> <p>Subject to 40 CFR Part 60, Subpart K, Ka or Kb = No</p>

Unit ID	Regulation	Index Number	Basis of Determination*
TK 2076	40 CFR Part 63, Subpart CC	63CC-TK2076	<p>Closed Vent System = Closed vent system is operated and maintained under negative pressure.</p> <p>Existing Source = The storage vessel is at a new source.</p> <p>Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6).</p> <p>Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I.</p> <p>True Vapor Pressure = Maximum true vapor pressure of the total organic HAPs in the liquid is less than 11.11 psi (76.6 kPa)</p> <p>By-pass Lines = Closed vent system has no by-pass lines.</p> <p>Emission Control Type = Closed vent system and control device</p> <p>Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb.</p> <p>Control Device Type = Control device other than a flare, thermal oxidizer, carbon adsorber, condenser or enclosed combustion device meeting residence time and temperature requirements.</p> <p>Group 1 Storage Vessel = The storage vessel is a Group 1 storage vessel (as defined in 40 CFR § 63.641)</p> <p>Control Device Design = The control device was installed after July 15, 1994 or was not designed to reduce inlet emission of total organic hazardous air pollutants by greater than or equal to 90% but less than 95%.</p> <p>Design Evaluation Submitted = Results of performance test were submitted to demonstrate compliance with 40 CFR § 63.119(e).</p>
TK 2077	30 TAC Chapter 115, Storage of VOCs	R5111	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
TK 2077	40 CFR Part 60, Subpart Kb	60Kb-TK 2077	<p>Product Stored = Waste mixture of indeterminate or variable composition</p> <p>Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters)</p> <p>Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia</p>
TK 2077	40 CFR Part 60, Subpart QQQ	60QQQ-TK2077	<p>Construction/Modification Date = After May 4, 1987</p> <p>Control Device Type = VOC recovery device other than a carbon adsorber</p> <p>Alternate Means of Emission Limitation = The EPA Administrator has not approved an alternate means of emission limitation.</p> <p>Alternative Monitoring = No alternative operational or process parameter is monitored.</p> <p>Alternative Standard = The storage vessel, slop oil tank, or auxiliary tank is not equipped with a floating roof.</p> <p>Subject to 40 CFR Part 60, Subpart K, Ka or Kb = No</p>



Unit ID	Regulation	Index Number	Basis of Determination*
TK 2077	40 CFR Part 63, Subpart CC	63CC-TK2077	<p>Closed Vent System = Closed vent system is operated and maintained under negative pressure.</p> <p>Existing Source = The storage vessel is at a new source.</p> <p>Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6).</p> <p>Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I.</p> <p>True Vapor Pressure = Maximum true vapor pressure of the total organic HAPs in the liquid is less than 11.11 psi (76.6 kPa)</p> <p>By-pass Lines = Closed vent system has no by-pass lines.</p> <p>Emission Control Type = Closed vent system and control device</p> <p>Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb.</p> <p>Control Device Type = Control device other than a flare, thermal oxidizer, carbon adsorber, condenser or enclosed combustion device meeting residence time and temperature requirements.</p> <p>Group 1 Storage Vessel = The storage vessel is a Group 1 storage vessel (as defined in 40 CFR § 63.641)</p> <p>Control Device Design = The control device was installed after July 15, 1994 or was not designed to reduce inlet emission of total organic hazardous air pollutants by greater than or equal to 90% but less than 95%.</p> <p>Design Evaluation Submitted = Results of performance test were submitted to demonstrate compliance with 40 CFR § 63.119(e).</p>
TK 2078	30 TAC Chapter 115, Storage of VOCs	R5111	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
TK 2078	40 CFR Part 60, Subpart Kb	60Kb-TK 2078	<p>Product Stored = Waste mixture of indeterminate or variable composition</p> <p>Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters)</p> <p>Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia</p>
TK 2078	40 CFR Part 60, Subpart QQQ	60QQQ-TK2078	<p>Construction/Modification Date = After May 4, 1987</p> <p>Control Device Type = VOC recovery device other than a carbon adsorber</p> <p>Alternate Means of Emission Limitation = The EPA Administrator has not approved an alternate means of emission limitation.</p> <p>Alternative Monitoring = No alternative operational or process parameter is monitored.</p> <p>Alternative Standard = The storage vessel, slop oil tank, or auxiliary tank is not equipped with a floating roof.</p> <p>Subject to 40 CFR Part 60, Subpart K, Ka or Kb = No</p>

Unit ID	Regulation	Index Number	Basis of Determination*
TK 2078	40 CFR Part 63, Subpart CC	63CC-TK2078	<p>Closed Vent System = Closed vent system is operated and maintained under negative pressure.</p> <p>Existing Source = The storage vessel is at a new source.</p> <p>Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6).</p> <p>Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I.</p> <p>True Vapor Pressure = Maximum true vapor pressure of the total organic HAPs in the liquid is less than 11.11 psi (76.6 kPa)</p> <p>By-pass Lines = Closed vent system has no by-pass lines.</p> <p>Emission Control Type = Closed vent system and control device</p> <p>Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb.</p> <p>Control Device Type = Control device other than a flare, thermal oxidizer, carbon adsorber, condenser or enclosed combustion device meeting residence time and temperature requirements.</p> <p>Group 1 Storage Vessel = The storage vessel is a Group 1 storage vessel (as defined in 40 CFR § 63.641)</p> <p>Control Device Design = The control device was installed after July 15, 1994 or was not designed to reduce inlet emission of total organic hazardous air pollutants by greater than or equal to 90% but less than 95%.</p> <p>Design Evaluation Submitted = Results of performance test were submitted to demonstrate compliance with 40 CFR § 63.119(e).</p>
TK 2085	30 TAC Chapter 115, Storage of VOCs	R5111	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
TK 2085	40 CFR Part 60, Subpart QQQ	60QQQ-TK2085	<p>Construction/Modification Date = After May 4, 1987</p> <p>Control Device Type = No control device</p> <p>Alternate Means of Emission Limitation = The EPA Administrator has not approved an alternate means of emission limitation.</p> <p>Alternative Monitoring = No alternative operational or process parameter is monitored.</p> <p>Alternative Standard = The storage vessel, slop oil tank, or auxiliary tank is equipped with a floating roof.</p>
TK 2093	30 TAC Chapter 115, Storage of VOCs	R5111	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>

Unit ID	Regulation	Index Number	Basis of Determination*
TK 2093	40 CFR Part 63, Subpart CC	63CC-TK2093	<p>Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6).</p> <p>Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I.</p> <p>Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb.</p> <p>Group 1 Storage Vessel = The storage vessel is a Group 2 vessel.</p> <p>Applicability = The storage vessel is required to comply with 40 CFR Part 63, Subpart CC and is part of a process unit.</p>
TK 2094	30 TAC Chapter 115, Storage of VOCs	R5111	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
TK 2094	40 CFR Part 63, Subpart CC	63CC-TK2094	<p>Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6).</p> <p>Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I.</p> <p>Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb.</p> <p>Group 1 Storage Vessel = The storage vessel is a Group 2 vessel.</p> <p>Applicability = The storage vessel is required to comply with 40 CFR Part 63, Subpart CC and is part of a process unit.</p>
TK 2096	30 TAC Chapter 115, Storage of VOCs	R5112-TK2096	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Welded tank using an external floating roof</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Primary Seal = Mechanical shoe</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
TK 2096	40 CFR Part 63, Subpart CC	63CC-TK2096	<p>Existing Source = The storage vessel is at a new source.</p> <p>Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6).</p> <p>Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I.</p> <p>True Vapor Pressure = Maximum true vapor pressure of the total organic HAPs in the liquid is less than 11.11 psi (76.6 kPa)</p> <p>Emission Control Type = External floating roof</p> <p>Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb.</p> <p>Group 1 Storage Vessel = The storage vessel is a Group 1 storage vessel (as defined in 40 CFR § 63.641)</p> <p>Seal Type = Two seals, one above the other, the primary seal being a metallic shoe seal</p>

Unit ID	Regulation	Index Number	Basis of Determination*
TK 2097	30 TAC Chapter 115, Storage of VOCs	R5112-TK2097	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Welded tank using an external floating roof</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Primary Seal = Mechanical shoe</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
TK 2097	40 CFR Part 63, Subpart CC	63CC-TK2097	<p>Existing Source = The storage vessel is at a new source.</p> <p>Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6).</p> <p>Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I.</p> <p>True Vapor Pressure = Maximum true vapor pressure of the total organic HAPs in the liquid is less than 11.11 psi (76.6 kPa)</p> <p>Emission Control Type = External floating roof</p> <p>Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb.</p> <p>Group 1 Storage Vessel = The storage vessel is a Group 1 storage vessel (as defined in 40 CFR § 63.641)</p> <p>Seal Type = Two seals, one above the other, the primary seal being a metallic shoe seal</p>
TK 2111	30 TAC Chapter 115, Storage of VOCs	R5111	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
TK 2111	40 CFR Part 63, Subpart CC	63CC-TK2111	<p>Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6).</p> <p>Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I.</p> <p>Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb.</p> <p>Group 1 Storage Vessel = The storage vessel is a Group 2 vessel.</p> <p>Applicability = The storage vessel is required to comply with 40 CFR Part 63, Subpart CC and is part of a process unit.</p>
TK 2113	30 TAC Chapter 115, Storage of VOCs	R5111	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>

Unit ID	Regulation	Index Number	Basis of Determination*
TK 2115	30 TAC Chapter 115, Storage of VOCs	R5111	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
TK 2120	30 TAC Chapter 115, Storage of VOCs	R5111	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
TK 2120	40 CFR Part 63, Subpart CC	63CC-TK2120	<p>Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6).</p> <p>Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I.</p> <p>Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb.</p> <p>Group 1 Storage Vessel = The storage vessel is a Group 2 vessel.</p> <p>Applicability = The storage vessel is required to comply with 40 CFR Part 63, Subpart CC and is part of a process unit.</p>
TK 2121	30 TAC Chapter 115, Storage of VOCs	R5111	<p>Today's Date = Today's date is March 1, 2013 or later.</p> <p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
TK 2121	40 CFR Part 63, Subpart CC	63CC-TK2121	<p>Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6).</p> <p>Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I.</p> <p>Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb.</p> <p>Group 1 Storage Vessel = The storage vessel is a Group 2 vessel.</p> <p>Applicability = The storage vessel is required to comply with 40 CFR Part 63, Subpart CC and is part of a process unit.</p>

Unit ID	Regulation	Index Number	Basis of Determination*
TK00001	30 TAC Chapter 115, Storage of VOCs	R5112-a1	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
TK00001	40 CFR Part 60, Subpart Kb	60Kb-00	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)</p>
TK00003	30 TAC Chapter 115, Storage of VOCs	R5112-a1	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
TK00003	40 CFR Part 60, Subpart Kb	60Kb-00	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)</p>
TK00004	30 TAC Chapter 115, Storage of VOCs	R5112-a1	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
TK00004	40 CFR Part 60, Subpart Kb	60Kb-00	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)</p>
TK00013	30 TAC Chapter 115, Storage of VOCs	R5112-a1	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>
TK00013	40 CFR Part 60, Subpart Kb	60Kb-00	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)</p>

Unit ID	Regulation	Index Number	Basis of Determination*
TK01942	30 TAC Chapter 115, Storage of VOCs	R5112-a1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
TK01942	40 CFR Part 60, Subpart Kb	60Kb-00	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
TK01942	40 CFR Part 63, Subpart CC	63CC-01	Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb. Group 1 Storage Vessel = The storage vessel is a Group 2 vessel. Applicability = The storage vessel is required to comply with 40 CFR Part 63, Subpart CC and is part of a process unit.
TK01943	30 TAC Chapter 115, Storage of VOCs	R5112-a1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons
TK01943	40 CFR Part 60, Subpart Kb	60Kb-00	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)
TK02139	30 TAC Chapter 115, Storage of VOCs	R5112-a1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
TK02139	40 CFR Part 60, Subpart Kb	60Kb-00	Product Stored = Volatile organic liquid Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia

Unit ID	Regulation	Index Number	Basis of Determination*
TK02139	40 CFR Part 63, Subpart CC	63CC-01	<p>Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6).</p> <p>Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I.</p> <p>Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb.</p> <p>Group 1 Storage Vessel = The storage vessel is a Group 2 vessel.</p> <p>Applicability = The storage vessel is required to comply with 40 CFR Part 63, Subpart CC and is part of a process unit.</p>
TK02140	30 TAC Chapter 115, Storage of VOCs	R5112-a1	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
TK02140	40 CFR Part 60, Subpart Kb	60Kb-00	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)</p>
TK02140	40 CFR Part 63, Subpart CC	63CC-01	<p>Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6).</p> <p>Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I.</p> <p>Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb.</p> <p>Group 1 Storage Vessel = The storage vessel is a Group 2 vessel.</p> <p>Applicability = The storage vessel is required to comply with 40 CFR Part 63, Subpart CC and is part of a process unit.</p>
TK1930	30 TAC Chapter 115, Storage of VOCs	R5112-01	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Welded tank using an external floating roof</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.0 psia but less than 1.5 psia</p> <p>Primary Seal = Mechanical shoe</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
TK1930	40 CFR Part 60, Subpart Kb	60Kb-01	<p>Product Stored = Petroleum liquid (other than petroleum or condensate)</p> <p>Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters)</p> <p>Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.5 psia but less than 0.75 psia</p> <p>Storage Vessel Description = Pontoon-type or double-deck-type external floating roof with mechanical shoe primary seal</p>



Unit ID	Regulation	Index Number	Basis of Determination*
TK1930	40 CFR Part 60, Subpart QQQ	60QQQ-01	<p>Construction/Modification Date = After May 4, 1987</p> <p>Control Device Type = No control device</p> <p>Alternate Means of Emission Limitation = The EPA Administrator has not approved an alternate means of emission limitation.</p> <p>Alternative Monitoring = No alternative operational or process parameter is monitored.</p> <p>Alternative Standard = The storage vessel, slop oil tank, or auxiliary tank is equipped with a floating roof.</p> <p>Subject to 40 CFR Part 60, Subpart K, Ka or Kb = Yes</p>
TK1930	40 CFR Part 61, Subpart FF	61FF-01	<p>Waste Treatment Tank = The tank manages, treats or stores a waste stream subject to 40 CFR Part 61, Subpart FF.</p> <p>Alternative Standard for Tanks = The tank is complying with the alternative standards in 40 CFR § 61.351.</p> <p>Kb Tank Type = Using an external floating roof that meets the requirements of 40 CFR § 60.112b(a)(2)</p> <p>Seal Type = Mechanical shoe primary seal</p>
TK2145	30 TAC Chapter 115, Storage of VOCs	R5112-02	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Welded tank using an external floating roof</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Primary Seal = Mechanical shoe</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>Secondary Seal = Secondary seal not determined since 30 TAC §§ 115.117(a)(4) or 115.117(b)(4) exemption is not utilized</p> <p>Storage Capacity = Capacity is greater than 40,000 gallons</p>
TK2145	40 CFR Part 60, Subpart Kb	60Kb-02	<p>Product Stored = Petroleum liquid (other than petroleum or condensate)</p> <p>Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters)</p> <p>Maximum True Vapor Pressure = True vapor pressure is greater than or equal to 0.75 psia but less than 11.1 psia</p> <p>Storage Vessel Description = Pontoon-type or double-deck-type external floating roof with mechanical shoe primary seal</p>
TK2145	40 CFR Part 63, Subpart CC	63CC-01	<p>Existing Source = The storage vessel is at a new source.</p> <p>Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6).</p> <p>Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I.</p> <p>True Vapor Pressure = Maximum true vapor pressure of the total organic HAPs in the liquid is less than 11.11 psi (76.6 kPa)</p> <p>Emission Control Type = External floating roof</p> <p>Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb.</p> <p>Group 1 Storage Vessel = The storage vessel is a Group 1 storage vessel (as defined in 40 CFR § 63.641)</p> <p>Seal Type = Two seals, one above the other, the primary seal being a liquid-mounted seal</p>

Unit ID	Regulation	Index Number	Basis of Determination*
TK2148	30 TAC Chapter 115, Storage of VOCs	R5112-03	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls True Vapor Pressure = True vapor pressure is less than 1.0 psia Product Stored = VOC other than crude oil or condensate Storage Capacity = Capacity is greater than 40,000 gallons
TK2148	40 CFR Part 60, Subpart Kb	60Kb-03	Product Stored = Petroleum liquid (other than petroleum or condensate) Storage Capacity = Capacity is greater than or equal to 39,900 gallons (151,000 liters) Maximum True Vapor Pressure = True vapor pressure is less than 0.5 psia
TK2148	40 CFR Part 60, Subpart QQQ	60QQQ-02	Construction/Modification Date = After May 4, 1987 Alternate Means of Emission Limitation = The EPA Administrator has not approved an alternate means of emission limitation. Alternative Monitoring = No alternative operational or process parameter is monitored. Alternative Standard = The storage vessel, slop oil tank, or auxiliary tank is not equipped with a floating roof. Subject to 40 CFR Part 60, Subpart K, Ka or Kb = No
TK2148	40 CFR Part 63, Subpart CC	63CC-02	Specified in 40 CFR § 63.640(g)(1)-(6) = The storage vessel is not part of a process specified in 40 CFR § 63.640(g)(1) - (6). Subject to 40 CFR Part 63 Subparts F, G, H or I = The storage vessel is not subject to 40 CFR Part 63, Subparts F, G, H, or I. Existing Kb Source = The storage vessel is not part of an existing source or is not subject to the provisions of 40 CFR Part 60, Subpart Kb. Group 1 Storage Vessel = The storage vessel is a Group 2 vessel. Applicability = The storage vessel is required to comply with 40 CFR Part 63, Subpart CC and is part of a process unit.
VPS5FE	40 CFR Part 63, Subpart CC	63CC-VPS5FE	Existing Source = The heat exchange system is at a new source. Construction/Reconstruction Date = Construction or reconstruction of the heat exchange system commenced after August 18, 1995, but before September 4, 2007. Alternatives = The owner or operator is using the continuous operating parameters monitoring and recordkeeping provisions listed in § 63.655(i).
VPS5H1/2	30 TAC Chapter 117, Subchapter B	R7201	Unit Type = Process heater Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1). Functionally Identical Replacement = Unit is not a functionally identical replacement.
VPS5H1/2	40 CFR Part 63, Subpart DDDDD	63DDDDD-HTR	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.
VPS5H1/2	40 CFR Part 60, Subpart J	60J-VPS5H1/2	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.

Unit ID	Regulation	Index Number	Basis of Determination*
VPS5H3/4	30 TAC Chapter 117, Subchapter B	R7201	Unit Type = Process heater Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1). Functionally Identical Replacement = Unit is not a functionally identical replacement.
VPS5H3/4	40 CFR Part 63, Subpart DDDDD	63DDDDDD-HTR	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.
VPS5H3/4	40 CFR Part 60, Subpart J	60J-VPS5H3/4	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.
VPS5VAC1HT	30 TAC Chapter 117, Subchapter B	R7201	Unit Type = Process heater Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1). Functionally Identical Replacement = Unit is not a functionally identical replacement.
VPS5VAC1HT	40 CFR Part 63, Subpart DDDDD	63DDDDDD-HTR	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.
VPS5VAC1HT	40 CFR Part 60, Subpart J	60J-VPS5VAC1HT	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.
VPS5VAC2HT	30 TAC Chapter 117, Subchapter B	R7201	Unit Type = Process heater Maximum Rated Capacity = Maximum rated capacity is at least 200 MMBtu/hr. RACT Date Placed in Service = On or after the final compliance date specified in 30 TAC §§ 117.9000, 117.9010 or 117.9020(1). Functionally Identical Replacement = Unit is not a functionally identical replacement.
VPS5VAC2HT	40 CFR Part 63, Subpart DDDDD	63DDDDDD-HTR	CONSTRUCTION/RECONSTRUCTION DATE = Construction or reconstruction began after June 4, 2010.
VPS5VAC2HT	40 CFR Part 60, Subpart J	60J-VPS5VAC2HT	Facility Type = Fuel gas combustion device, other than a flare, that does not meet requirements in §§ 60.105(a)(4)(iv) or 60.105(b). Construction/Modification Date = After June 11, 1973 and on or before May 14, 2007. Monitoring Device = No instrument is in place for continuously monitoring and recording the concentration by volume of SO <sub>2</sub> emissions into the atmosphere.

\* - The "unit attributes" or operating conditions that determine what requirements apply

## NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

## New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room, located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

[www.tceq.texas.gov/permitting/air/permitbyrule/historical\\_rules/old106list/index106.html](http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html)

Outdated Standard Exemption lists may be viewed at the following Web site:

[www.tceq.texas.gov/permitting/air/permitbyrule/historical\\_rules/oldselist/se\\_index.html](http://www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html)

The status of air permits and applications and a link to the Air Permits Remote Document Server is located at the following Web site:

[www.tceq.texas.gov/permitting/air/nav/air\\_status\\_permits.html](http://www.tceq.texas.gov/permitting/air/nav/air_status_permits.html)

<b>Prevention of Significant Deterioration (PSD) Permits</b>	
PSD Permit No.: GHGPSDTX121	Issuance Date: 07/30/2015
PSD Permit No.: PSDTX1062M1	Issuance Date: 06/15/2016
PSD Permit No.: PSDTX1062M2	Issuance Date: 07/15/2016
<b>Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.</b>	
Authorization No.: 6056	Issuance Date: 07/15/2016
Authorization No.: 8404	Issuance Date: 06/15/2016
<b>Permits By Rule (30 TAC Chapter 106) for the Application Area</b>	
Number: 106.261	Version No./Date: 11/01/2003
Number: 106.262	Version No./Date: 11/01/2003
Number: 106.263	Version No./Date: 11/01/2001
Number: 106.472	Version No./Date: 09/04/2000
Number: 106.476	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 09/04/2000
Number: 106.512	Version No./Date: 06/13/2001

## **Emission Units and Emission Points**

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the “Maximum Allowable Emission Rate Table”, or “MAERT” for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

## **Monitoring Sufficiency**

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit’s compliance with the applicable emission limitation or standard. Furthermore, the federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

## Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

### Compliance Assurance Monitoring (CAM):

Compliance Assurance Monitoring (CAM) is a federal monitoring program established under Title 40 Code of Federal Regulations Part 64 (40 CFR Part 64).

Emission units are subject to CAM requirements if they meet the following criteria:

1. the emission unit is subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement;
2. the emission unit uses a control device to achieve compliance with the emission limitation or standard specified in the applicable requirement; and
3. the emission unit has the pre-control device potential to emit greater than or equal to the amount in tons per year for a site to be classified as a major source.

The following table(s) identify the emission unit(s) that are subject to CAM:

Unit/Group/Process Information	
ID No.: PRO SRU 4	
Control Device ID No.: STGTU2-1	Control Device Type: Sulfur Recovery Unit with Incinerator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: R112-01
Pollutant: SO <sub>2</sub>	Main Standard: § 112.7(a)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: Minimum combustion temperature = 1200 degrees F	
Basis of CAM: A common way to determine if a sulfur recovery unit (SRU) is operating correctly is to operate the thermal incinerator above a minimal combustion temperature based on performance tests, manufacturer's recommendations, engineering calculations and/or historical data. The monitoring of combustion temperature of a thermal incinerator used to oxidize sulfur compounds is required in 40 CFR Part 60, Subparts BB (Standards of Performance for Kraft Pulp Mills) and LLL (Standards of Performance for Onshore Natural Gas Processing: SO <sub>2</sub> Emissions). Additionally, this option requires the monitoring of the SO <sub>2</sub> mass emission rate since an increase in SO <sub>2</sub> emissions may indicate operational problems with the SRU.	

Unit/Group/Process Information	
ID No.: PRO SRU 4	
Control Device ID No.: STGTU2-1	Control Device Type: Sulfur Recovery Unit with Incinerator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: R112-01
Pollutant: SO <sub>2</sub>	Main Standard: § 112.7(a)
Monitoring Information	
Indicator: SO <sub>2</sub> Mass Emissions in Pounds per Hour	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: For stack flow rates less than or equal to 4000 scfm: Maximum SO <sub>2</sub> in lb/hr = 123.4 + 0.091 x (stack effluent flowrate, scfm); For stack flow rates greater than 4000 scfm: Maximum SO <sub>2</sub> in lb/hr = 0.614 x (stack effluent flowrate, scfm) <sup>0.8042</sup>	
Basis of CAM: A common way to determine if a sulfur recovery unit (SRU) is operating correctly is to operate the thermal incinerator above a minimal combustion temperature based on performance tests, manufacturer's recommendations, engineering calculations and/or historical data. The monitoring of combustion temperature of a thermal incinerator used to oxidize sulfur compounds is required in 40 CFR Part 60, Subparts BB (Standards of Performance for Kraft Pulp Mills) and LLL (Standards of Performance for Onshore Natural Gas Processing: SO <sub>2</sub> Emissions). Additionally, this option requires the monitoring of the SO <sub>2</sub> mass emission rate since an increase in SO <sub>2</sub> emissions may indicate operational problems with the SRU.	



Unit/Group/Process Information	
ID No.: PRO SRU 5-1	
Control Device ID No.: STGTU5-1	Control Device Type: Sulfur Recovery Unit with Incinerator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: 112SRU5-1
Pollutant: SO <sub>2</sub>	Main Standard: § 112.7(a)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: Minimum combustion temperature = 1200 degrees F	
<p>Basis of CAM: A common way to determine if a sulfur recovery unit (SRU) is operating correctly is to operate the thermal incinerator above a minimal combustion temperature based on performance tests, manufacturer's recommendations, engineering calculations and/or historical data. The monitoring of combustion temperature of a thermal incinerator used to oxidize sulfur compounds is required in 40 CFR Part 60, Subparts BB (Standards of Performance for Kraft Pulp Mills) and LLL (Standards of Performance for Onshore Natural Gas Processing: SO<sub>2</sub> Emissions). Additionally, this option requires the monitoring of the SO<sub>2</sub> mass emission rate since an increase in SO<sub>2</sub> emissions may indicate operational problems with the SRU.</p>	

Unit/Group/Process Information	
ID No.: PRO SRU 5-1	
Control Device ID No.: STGTU5-1	Control Device Type: Sulfur Recovery Unit with Incinerator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: 112SRU5-1
Pollutant: SO <sub>2</sub>	Main Standard: § 112.7(a)
Monitoring Information	
Indicator: SO <sub>2</sub> Mass Emissions in Pounds per Hour	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: For stack flow rates less than or equal to 4000 scfm: Maximum SO <sub>2</sub> in lb/hr = 123.4 + 0.091 x (stack effluent flowrate, scfm); For stack flow rates greater than 4000 scfm: Maximum SO <sub>2</sub> in lb/hr = 0.614 x (stack effluent flowrate, scfm) <sup>0.8042</sup>	
Basis of CAM: A common way to determine if a sulfur recovery unit (SRU) is operating correctly is to operate the thermal incinerator above a minimal combustion temperature based on performance tests, manufacturer's recommendations, engineering calculations and/or historical data. The monitoring of combustion temperature of a thermal incinerator used to oxidize sulfur compounds is required in 40 CFR Part 60, Subparts BB (Standards of Performance for Kraft Pulp Mills) and LLL (Standards of Performance for Onshore Natural Gas Processing: SO <sub>2</sub> Emissions). Additionally, this option requires the monitoring of the SO <sub>2</sub> mass emission rate since an increase in SO <sub>2</sub> emissions may indicate operational problems with the SRU.	

Unit/Group/Process Information	
ID No.: PRO SRU 6-1	
Control Device ID No.: STGTU6-1	Control Device Type: Sulfur Recovery Unit with Incinerator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: 112SRU6-1
Pollutant: SO <sub>2</sub>	Main Standard: § 112.7(a)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: Minimum combustion temperature = 1200 degrees F	
<p>Basis of CAM: A common way to determine if a sulfur recovery unit (SRU) is operating correctly is to operate the thermal incinerator above a minimal combustion temperature based on performance tests, manufacturer's recommendations, engineering calculations and/or historical data. The monitoring of combustion temperature of a thermal incinerator used to oxidize sulfur compounds is required in 40 CFR Part 60, Subparts BB (Standards of Performance for Kraft Pulp Mills) and LLL (Standards of Performance for Onshore Natural Gas Processing: SO<sub>2</sub> Emissions). Additionally, this option requires the monitoring of the SO<sub>2</sub> mass emission rate since an increase in SO<sub>2</sub> emissions may indicate operational problems with the SRU.</p>	

Unit/Group/Process Information	
ID No.: PRO SRU 6-1	
Control Device ID No.: STGTU6-1	Control Device Type: Sulfur Recovery Unit with Incinerator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: 112SRU6-1
Pollutant: SO <sub>2</sub>	Main Standard: § 112.7(a)
Monitoring Information	
Indicator: SO <sub>2</sub> Mass Emissions in Pounds per Hour	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: For stack flow rates less than or equal to 4000 scfm: Maximum SO <sub>2</sub> in lb/hr = 123.4 + 0.091 x (stack effluent flowrate, scfm); For stack flow rates greater than 4000 scfm: Maximum SO <sub>2</sub> in lb/hr = 0.614 x (stack effluent flowrate, scfm) <sup>0.8042</sup>	
Basis of CAM: A common way to determine if a sulfur recovery unit (SRU) is operating correctly is to operate the thermal incinerator above a minimal combustion temperature based on performance tests, manufacturer's recommendations, engineering calculations and/or historical data. The monitoring of combustion temperature of a thermal incinerator used to oxidize sulfur compounds is required in 40 CFR Part 60, Subparts BB (Standards of Performance for Kraft Pulp Mills) and LLL (Standards of Performance for Onshore Natural Gas Processing: SO <sub>2</sub> Emissions). Additionally, this option requires the monitoring of the SO <sub>2</sub> mass emission rate since an increase in SO <sub>2</sub> emissions may indicate operational problems with the SRU.	

Unit/Group/Process Information	
ID No.: PRO SRU 7-1	
Control Device ID No.: STGTU7-1	Control Device Type: Sulfur Recovery Unit with Incinerator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: 112SRU7-1
Pollutant: SO <sub>2</sub>	Main Standard: § 112.7(a)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: Minimum combustion temperature = 1200 degrees F	
<p>Basis of CAM: A common way to determine if a sulfur recovery unit (SRU) is operating correctly is to operate the thermal incinerator above a minimal combustion temperature based on performance tests, manufacturer's recommendations, engineering calculations and/or historical data. The monitoring of combustion temperature of a thermal incinerator used to oxidize sulfur compounds is required in 40 CFR Part 60, Subparts BB (Standards of Performance for Kraft Pulp Mills) and LLL (Standards of Performance for Onshore Natural Gas Processing: SO<sub>2</sub> Emissions). Additionally, this option requires the monitoring of the SO<sub>2</sub> mass emission rate since an increase in SO<sub>2</sub> emissions may indicate operational problems with the SRU.</p>	

Unit/Group/Process Information	
ID No.: PRO SRU 7-1	
Control Device ID No.: STGTU7-1	Control Device Type: Sulfur Recovery Unit with Incinerator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: 112SRU7-1
Pollutant: SO <sub>2</sub>	Main Standard: § 112.7(a)
Monitoring Information	
Indicator: SO <sub>2</sub> Mass Emissions in Pounds per Hour	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: For stack flow rates less than or equal to 4000 scfm: Maximum SO <sub>2</sub> in lb/hr = 123.4 + 0.091 x (stack effluent flowrate, scfm); For stack flow rates greater than 4000 scfm: Maximum SO <sub>2</sub> in lb/hr = 0.614 x (stack effluent flowrate, scfm) <sup>0.8042</sup>	
Basis of CAM: A common way to determine if a sulfur recovery unit (SRU) is operating correctly is to operate the thermal incinerator above a minimal combustion temperature based on performance tests, manufacturer's recommendations, engineering calculations and/or historical data. The monitoring of combustion temperature of a thermal incinerator used to oxidize sulfur compounds is required in 40 CFR Part 60, Subparts BB (Standards of Performance for Kraft Pulp Mills) and LLL (Standards of Performance for Onshore Natural Gas Processing: SO <sub>2</sub> Emissions). Additionally, this option requires the monitoring of the SO <sub>2</sub> mass emission rate since an increase in SO <sub>2</sub> emissions may indicate operational problems with the SRU.	

Unit/Group/Process Information	
ID No.: PRO SRU2&3	
Control Device ID No.: STGTU1-1	Control Device Type: Sulfur Recovery Unit with Incinerator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: R112-01
Pollutant: SO <sub>2</sub>	Main Standard: § 112.7(a)
Monitoring Information	
Indicator: Combustion Temperature / Exhaust Gas Temperature	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: Minimum combustion temperature is 1200 degrees F	
<p>Basis of CAM: A common way to determine if a sulfur recovery unit (SRU) is operating correctly is to operate the thermal incinerator above a minimal combustion temperature based on performance tests, manufacturer's recommendations, engineering calculations and/or historical data. The monitoring of combustion temperature of a thermal incinerator used to oxidize sulfur compounds is required in 40 CFR Part 60, Subparts BB (Standards of Performance for Kraft Pulp Mills) and LLL (Standards of Performance for Onshore Natural Gas Processing: SO<sub>2</sub> Emissions). Additionally, this option requires the monitoring of the SO<sub>2</sub> mass emission rate since an increase in SO<sub>2</sub> emissions may indicate operational problems with the SRU.</p>	

Unit/Group/Process Information	
ID No.: PRO SRU2&3	
Control Device ID No.: STGTU1-1	Control Device Type: Sulfur Recovery Unit with Incinerator
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 112, Sulfur Compounds	SOP Index No.: R112-01
Pollutant: SO <sub>2</sub>	Main Standard: § 112.7(a)
Monitoring Information	
Indicator: SO <sub>2</sub> Mass Emissions in Pounds per Hour	
Minimum Frequency: four times per hour	
Averaging Period: one hour	
Deviation Limit: For stack flow rates less than or equal to 4000 scfm: Maximum SO <sub>2</sub> in lb/hr = 123.4 + 0.091 x (stack effluent flowrate, scfm); For stack flow rates greater than 4,000 scfm Maximum SO <sub>2</sub> in lb/hr = 0.614 x (stack effluent flowrate, scfm) <sup>0.8042</sup>	
Basis of CAM: A common way to determine if a sulfur recovery unit (SRU) is operating correctly is to operate the thermal incinerator above a minimal combustion temperature based on performance tests, manufacturer's recommendations, engineering calculations and/or historical data. The monitoring of combustion temperature of a thermal incinerator used to oxidize sulfur compounds is required in 40 CFR Part 60, Subparts BB (Standards of Performance for Kraft Pulp Mills) and LLL (Standards of Performance for Onshore Natural Gas Processing: SO <sub>2</sub> Emissions). Additionally, this option requires the monitoring of the SO <sub>2</sub> mass emission rate since an increase in SO <sub>2</sub> emissions may indicate operational problems with the SRU.	



### Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information	
ID No.: SCRU5-1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-SCRU5-1
Pollutant: PM (Opacity)	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: Once per month	
Averaging Period: Six-minutes	
Deviation Limit: Opacity less than or equal to 15%	
<p>Basis of monitoring: The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p>	

Unit/Group/Process Information	
ID No.: SCRU5-2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-SCRU5-2
Pollutant: PM (Opacity)	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: Once per month	
Averaging Period: Six-minutes	
Deviation Limit: Opacity less than or equal to 15%	
<p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p>	

Unit/Group/Process Information	
ID No.: SHCU2-5	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-SHCU2-5
Pollutant: PM (Opacity)	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: Once per month	
Averaging Period: Six-minutes	
Deviation Limit: Opacity less than or equal to 15%	
<p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p>	

<b>Unit/Group/Process Information</b>	
ID No.: SNHTU2-3	
Control Device ID No.: N/A	Control Device Type: N/A
<b>Applicable Regulatory Requirement</b>	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-SNHTU2-3
Pollutant: PM (Opacity)	Main Standard: § 111.111(a)(1)(C)
<b>Monitoring Information</b>	
Indicator: Opacity	
Minimum Frequency: Once per month	
Averaging Period: Six-minutes	
Deviation Limit: Opacity less than or equal to 15%	
<p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p>	

Unit/Group/Process Information	
ID No.: SPS4-1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-SPS4-1
Pollutant: PM (Opacity)	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: Once per month	
Averaging Period: Six-minutes	
Deviation Limit: Opacity less than or equal to 15%	
<p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p>	

Unit/Group/Process Information	
ID No.: SPS4-2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-SPS4-2
Pollutant: PM (Opacity)	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: Once per month	
Averaging Period: Six-minutes	
Deviation Limit: Opacity less than or equal to 15%	
<p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p>	

Unit/Group/Process Information	
ID No.: SPS4-3	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-SPS4-3
Pollutant: PM (Opacity)	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: Once per month	
Averaging Period: Six-minutes	
Deviation Limit: Opacity less than or equal to 15%	
<p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p>	

Unit/Group/Process Information	
ID No.: SPS4-4	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-SPS4-4
Pollutant: PM (Opacity)	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: Once per month	
Averaging Period: Six-minutes	
Deviation Limit: Opacity less than or equal to 15%	
<p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p>	



Unit/Group/Process Information	
ID No.: SVPS5-1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-SVPS5-1
Pollutant: PM (Opacity)	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: Once per month	
Averaging Period: Six-minutes	
Deviation Limit: Opacity less than or equal to 15%	
<p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p>	

Unit/Group/Process Information	
ID No.: SVPS5-2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-SVPS5-2
Pollutant: PM (Opacity)	Main Standard: § 111.111(a)(1)(C)
Monitoring Information	
Indicator: Opacity	
Minimum Frequency: Once per month	
Averaging Period: Six-minutes	
Deviation Limit: Opacity less than or equal to 15%	
<p>Basis of monitoring:</p> <p>The option to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.</p>	

## Compliance Review

### Compliance History Review

1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on .....7/18/16  
Site rating: 22.07 / Satisfactory Company rating: 7.52 / Satisfactory  
(High < 0.10; Satisfactory ≥ 0.10 and ≤ 55; Unsatisfactory > 55)
2. Has the permit changed on the basis of the compliance history or site/company rating? ..... No

### Site/Permit Area Compliance Status Review

1. Were there any out-of-compliance units listed on Form OP-ACPS? ..... Yes
2. Is a compliance plan and schedule included in the permit? ..... Yes

The permit incorporates a compliance plan and schedule for a storage tank, TK-1928, that currently has unauthorized emissions. Motiva filed a permit amendment to NSR permit 6058 to authorize emissions from this tank. The permit also contains a compliance plan and schedule for several flares for installing monitoring equipment to demonstrate compliance with 40 CFR Part 60, Subpart Ja.

### Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes  
OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes  
OP-UA3 - Storage Tank/Vessel Attributes  
OP-UA4 - Loading/Unloading Operations Attributes  
OP-UA5 - Process Heater/Furnace Attributes  
OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes  
OP-UA7 - Flare Attributes  
OP-UA8 - Coal Preparation Plant Attributes  
OP-UA9 - Nonmetallic Mineral Process Plant Attributes  
OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes  
OP-UA11 - Stationary Turbine Attributes  
OP-UA12 - Fugitive Emission Unit Attributes  
OP-UA13 - Industrial Process Cooling Tower Attributes  
OP-UA14 - Water Separator Attributes  
OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes  
OP-UA16 - Solvent Degreasing Machine Attributes  
OP-UA17 - Distillation Unit Attributes  
OP-UA18 - Surface Coating Operations Attributes  
OP-UA19 - Wastewater Unit Attributes  
OP-UA20 - Asphalt Operations Attributes  
OP-UA21 - Grain Elevator Attributes  
OP-UA22 - Printing Attributes  
OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes  
OP-UA25 - Synthetic Fiber Production Attributes  
OP-UA26 - Electroplating and Anodizing Unit Attributes  
OP-UA27 - Nitric Acid Manufacturing Attributes  
OP-UA28 - Polymer Manufacturing Attributes  
OP-UA29 - Glass Manufacturing Unit Attributes  
OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semichemical Pulp Mill Attributes  
OP-UA31 - Lead Smelting Attributes  
OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes  
OP-UA33 - Metallic Mineral Processing Plant Attributes  
OP-UA34 - Pharmaceutical Manufacturing  
OP-UA35 - Incinerator Attributes  
OP-UA36 - Steel Plant Unit Attributes  
OP-UA37 - Basic Oxygen Process Furnace Unit Attributes  
OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes

OP-UA39 - Sterilization Source Attributes  
OP-UA40 - Ferroalloy Production Facility Attributes  
OP-UA41 - Dry Cleaning Facility Attributes  
OP-UA42 - Phosphate Fertilizer Manufacturing Attributes  
OP-UA43 - Sulfuric Acid Production Attributes  
OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes  
OP-UA45 - Surface Impoundment Attributes  
OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes  
OP-UA47 - Ship Building and Ship Repair Unit Attributes  
OP-UA48 - Air Oxidation Unit Process Attributes  
OP-UA49 - Vacuum-Producing System Attributes  
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes  
OP-UA51 - Dryer/Kiln/Oven Attributes  
OP-UA52 - Closed Vent Systems and Control Devices  
OP-UA53 - Beryllium Processing Attributes  
OP-UA54 - Mercury Chlor-Alkali Cell Attributes  
OP-UA55 - Transfer System Attributes  
OP-UA56 - Vinyl Chloride Process Attributes  
OP-UA57 - Cleaning/Depainting Operation Attributes  
OP-UA58 - Treatment Process Attributes  
OP-UA59 - Coke By-Product Recovery Plant Attributes  
OP-UA60 - Chemical Manufacturing Process Unit Attributes  
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes  
OP-UA62 - Glycol Dehydration Unit Attributes  
OP-UA63 - Vegetable Oil Production Attributes